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## INFLUENCE OF RELIGIOUS BELIEFS ON THE GEOGRAPHICAL DISTRIBUTION OF BRAHMANS IN BENGAL

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OF the seven rivers sacred to the Hindus, namely, the Ganga, the Yamuna, the Saraswati, the Narmada, the Indus (Sindhu), the Cauvery and the Godavari, the Ganga is the holiest of holies. The Ganga, also known as the Jahnvi below Sultanganj (Bhagalpur district), takes the name Bhagirathi below Suti, where the main stream separates and is known as the Padma. It is held not to be as sacred as the Bhagirathi. In its lower reaches it is described as the Hooghly by European cartographers. It meets the sea at Sagar Island.

Its original bed down Calcutta has been silted up in many places and at places blocked up, both naturally and artificially, by bunds or embankments. It now progresses towards the sea through the old bed of the Saraswati and of the Rupnarayan; but this portion is not held to be sacred. On

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the other hand, the silted up and abandoned bed from Calcutta to Jaynagore-Majilpore and beyond is held to be sacred. There are many sacred shrines on its banks. The silting took place some three or four hundred years ago. In some portions, it is tidal even today ; and during the rains some lengths are covered by plenty of water. Indeed, there would have been some flow had it not been obstructed artificially.

2. On the question as to how far the bed of the Ganga extends; it is said in the *Danadharma* :

भाद्रे कृष्णाचतुर्दश्यां यावदाक्रमते जलम् ।

तावद्गर्भं विजानीयात् तद्दूर्ध्वं तीरमुच्यते ॥

‘On the fourteenth day of the dark half (of the lunar month) in the month of Bhadra (August-September) all that is covered by water is the bed of the river. Beyond and higher than it is the teer or bank.’

This is a free translation giving the sense of the passage.

3. In the *Brahma Purana* ( ब्रह्मपुराण ) it is said

प्रवाहमवधिं कृत्वा यावद्वस्तचतुष्टयम् ।

अत्र नारायणः स्वामी नान्यः स्वामी कदाचन ॥

‘Narayana (i.e. God) is the owner of four cubits of land from the flow (of the Ganga) ; no one else has any right over it.’

This rule, applied to both banks of the river, was intended most probably to reserve this piece of land for towage of boats and for safe anchorage.

4. *Brahma Purana* defines the bank or teer as follows :

सार्द्धहस्तशतं यावत् गर्भतस्तीरमुच्यते ।

‘Banks extend up to 150 cubits (=225 feet) from the bed of the river.’

5. In the *Skanda Purana* we find :

तीराद् गव्युतिमात्रस्तु परितः क्षेत्रमुच्यते ।

तत् दानं तपो होमो गङ्गायां नात्र संशयः ।

अत्रस्थास्त्रिदिवं यान्ति ये मृतास्तेऽपुनर्भवाः ॥

'Two kroses (4 miles) from the bank (teer) on all sides is called the k s h e t r a. Any gift or donation, austerity, or h o m a (sacrifice) performed here (in the kshetra) is equivalent to that done or performed on the Ganga. Any person who dies here goes to heaven ; he has no re-birth.

6. We find in the *Brahma Purana* :

अत्र दूरे समीपे वा सदृशं योजनद्वयम् ।

गङ्गायां मरणेनेह नात्र कार्यं विचारणा ॥

This has been also quoted with approval in the *Tirtha-chintamani*.

'Whether far or near, all places within two y o j a n a s (4 kroses = 8 miles) are equal (in sanctity). A death here is equivalent to death in the Ganga ; there is no room for discussion in this matter.'

7. All these texts are cited by the great Smarta Raghu-nandan in his *Prayaschitta-Tattwa*. He is said to have been a contemporary of Lord Gouranga, i.e. he flourished in the first half of the sixteenth century A.D.

8. Brahmans are upholders of orthodox Brahmanical Hinduism. A firm belief in the truth of the above religious texts is expected to have influenced them for centuries. We may find the influence reflected in their geographical distribution or concentration along the banks and regions on the Ganga.

9. The area of the District of 24-Parganas is 5,257 sq. miles. This was the area in 1931. The total number of Brahmans in this district was 91,003 in 1911. They were distributed as follows :

Thanas on the Ganga	Area	No. of Brahmans
Naihati	96	8,618
Dum Dum	50	1,254
Khardaha	17	2,233
Noapara	6	518
Barrackpore	13	5,930
Baranagar	8	5,926
Barasat	98	5,454
Total	288	29,933

**Municipalities of**

Cossipur-Chitpur

Maniktala, Garden Reach	10	7,840
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**Thanas on the Adi-Ganga**

(the old bed)

Barnipur	95	4,126
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Jayanagar	60	5,035
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Sonarpur	41	5,018
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Behala	37	1,306
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	<hr/> 233	<hr/> 15,485
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The Hindus preponderated in Cossipur-Chitpur ; the Muhammadans were in a majority in Maniktala. The population of these three municipalities in 1911 was :

Per cent of  
Hindus

71.5	Cossipur-Chitpur	48,178	3.2 sq. miles
61.3	Maniktala	53,767	3.4 „
47.0	Garden Reach	45,295	3.4 „
		<hr/> 1,47,240	<hr/> 10.0 „

We exclude Garden Reach, as it is not on the banks of either the Ganga or the Adi Ganga, though it lies within the 8-mile limit from both. The population is floating. We estimate the number of Brahmans in these two municipalities at *two-thirds* of the above figure. This is a cautious estimate. The estimated number of Brahmans is 5,227.

The grand total of Brahmans in these three regions is 50,645 or 55.6 per cent of the total.

10. We give below the 1931 figures. By this date, the three municipalities of Cossipur-Chitpur, Manicktala and Garden Reach had been merged in Calcutta under Sir Surendra Nath Banerjea's Calcutta Municipal Act, 1923.

Deducting the figures for these *three* municipalities, the the population of Brahmans in the remaining regions on the Ganga comes down from 55.6 per cent to 49.9 per cent of the total Brahmans in the District in 1911.



The number of Brahmans in 1931 is given below. By this time many thanas were sub-divided, and their areas changed.

		Area in sq. miles	No. of Brahmans
Naihati	Naihati	16	2,413
	Jagaddal	23	7,035
	Bijpnr	15	2,436
		<hr/> 54	<hr/> 11,884
Khardaha	Khardaha	21	5,323
	Titagar	1.4	4,167
		<hr/> 22.4	<hr/> 9,490
Barrackpore		4	1,124
Baranagar		9	8,993
Noapara		6	2,639
Barasat	Barasat	104	4,197
	Amdanga	54	354
	Rajarhat	40	1,032
		<hr/> 198	<hr/> 5,583
Dum Dum		16	2,195
Total area		<hr/> 309.4	<hr/> 41,908

The thanas on the Adi Ganga had the following number of Brahmans in 1931.

		Area	Brahmans
Baruipur		83 sq. m.	4,126
Jaynagar		280	5,035
Sonarpur		53	5,018
Behala	Behala	20	1,306
	Metiaburuz	3	70
	Mahestala	18	1,165
		<hr/> 41	<hr/> 2,541
		<hr/> 457	<hr/> 16,720

The total of Brahmans in 1911 and 1931 as well as the respective areas are given below for easy reference.

		Thanas beside Ganga	Thanas beside Adi Ganga
1911	Area	288 sq. miles	233 sq. miles
	Number	29,933	15,485
1931	Area	309.4 sq. miles	457 sq. miles
	Number	41,908	16,720

The total area in 1911 was 521 sq. miles ; in 1931 it was 766.4 sq. miles. The total of Brahmans in 1911 was 45,418 ; in 1931 it was 58,628.

The percentage of Brahmans on both sides of the Ganga and the Adi Ganga in 1931 was 54.8 per cent as against 49.9 per cent in 1911. The total of Brahmans in the district was 1,07,251 in 1931. A part of the increase is no doubt due to the inclusion of larger areas, but not all. This we think to be relatively small. The Brahmans have increased in the district by 17.8 per cent between 1911 and 1931 ; and in the whole of Bengal by 15.5 per cent.

The difference between the two percentages may be taken to be due to immigration into the district from outside. In the areas adjoining the river the increases were as follows :

Ganga-side area	40.1%
Adi Ganga-side area	8.0%
Difference	32.1%

The difference may be taken as due to immigration into the industrial area, i.e. the neighbourhood of the Ganga from both outside and inside the district, because of greater opportunities of employment and urban facilities.

The respective density of Brahmans per 100 sq. miles in 1911 is :

		Comparative density
Ganga-side tract	9,592	13.2
Other areas	726	1

Immigration or non-immigration, there cannot be any doubt

that the reputed sanctity of the river has drawn many Brahmans to its side.

11. We now proceed to give the figures for the districts of Howrah and Hooghly thana by thana.

	1931 Area	No. of Brahmans
<b>Howrah District</b>	<b>522</b>	<b>79,909</b>
Howrah	10	29,652
Baly	18	6,274
Sankrail	29	3,510
	<hr/> 57	<hr/> 39,436
<b>Hooghly District</b>	<b>1,188</b>	<b>84,172</b>
Balagar	78	3,304
Chinsura	12	5,775
Magra	24	2,307
Serampur	21	12,006
Uttarpara	10	8,904
Bhadreswar	15	3,518
	<hr/> 160	<hr/> 38,814

The percentage of Brahmans in the area adjacent to the river is as follows :

Howrah	50.6%
Hooghly	46.2%

The respective density of Brahmans per 100 sq. miles is :

	Ganga-side area	Other area	Comparative density
Howrah	69,186	8,204	8 : 1
Howrah (excluding city)	20,817	8,704	2.4 : 1
Hooghly	24,259	4,412	5.5 : 1

The very high figure for density in Howrah is partly due to concentration in the city of Howrah.

12. We now proceed to give the 1931 figures for the district of Burdwan.

	Area in sq. miles	No. of Brahmans	Brahmans per 100 sq. miles
<b>Burdwan District</b>	2,705	1,17,421	4,341
Thanas adjoining the Ganga			
Katwa	131	11,089	8,465
Ketugram	138	5,693	4,125
Kalna	134	7,192	5,367
Purbasthali	133	3,550	2,669
	<hr/> 536	<hr/> 27,524	<hr/> 5,135
Areas away from the Ganga in Burdwan	2,169	89,897	4,144
Comparative density is 1.24 : 1			

The percentage of Brahmans in the four thanas adjoining the river is 23.5.

13. The spread of Brahmans from the neighbourhood of the Ganga to the interior of the district may be partly explained by gifts made by rich donors. The Maharajas of Burdwan, the Bansberia Raj and other Kayastha zemindars made large grants of land to Brahmans; some of them ruined themselves in trying to make large donations. It is said that Manohar Rai used to donate 5 bighas of land to Brahmans daily; and when there was no more k h a s land, he abdicated.

With reference to the Burdwan Raj, we find in *Ferminger's Fifth Report*, vol. II, p. 416 :

'The territory thus alienated and ascertained by Mr. Johnstone, after an arduous scrutiny of 70 persons for eight months in 1763-4 A. D. (since which the quantity hath certainly not diminished) was 5,68,736 begas, making near a fifth part of all the arable productive ground in the zamindary.'

A rough estimate may be made of the Brahmans thus provided for. Dividing the number of Brahmans in the district by 5.1, the number of families is 23,024. The area of the Burdwan Raj was 5,174 sq. miles. Half the above

quantity of land is within the district; and half of this has been granted to the Brahmans. This is our idea. Produce of 15 bighas is more than sufficient for a family. The amount of land alienated in favour of Brahmans is 1,50,000 bighas and the number of families provided for is 10,000, i.e. nearly half the Brahman families have got grant of lands.

That large grants were made to Brahmans will appear from the following facts. Cess demand is proportional to raiyati assets. The number, cess-demand and average cess-demand on revenue-paying estates and revenue-free estates in the district of Burdwan as on 31. 3. 1940 are given below :

	Number	Demand	Average
Revenue-paying estates	4,973	3,35,087	67.38
Revenue-free estates	903	16,405	18.17

14. We now come to the districts of Nadia and Murshidabad. The relevant data are :

#### NADIA

	Area in sq. miles	No. of Brahmans (1931)	No. of Brahmans per 100 sq. mile
<b>Nadia District</b>	2,881	43,425	1,507
Thanas adjacent to the river			
Kaliganj	112	2,091	1,867
Nakasipara	140	2,436	1,740
Nabadwip	45	4,321	9,602
Krishnagar	138	5,721	4,146
Santipur	76	3,856	5,074
Chakdaha	126	1,915	1,520
Ranaghat	171	4,689	2,742
	<hr/> 808	<hr/> 25,029	<hr/> 3,098
Non-Ganga area of Nadia	2,073	18,396	888

(The primary data are taken from the *Land Revenue Administration Report for Bengal for 1939-40*, p. 55).

The percentage of Brahmans in the neighbourhood of the Ganga is 57.7.

Comparative density  $3098 : 888 = 3.49 : 1$

### MURSHIDABAD

	Area in sq. miles	No. of Brahmans in 1931	No. of Brahmans per 100 sq. mile
<b>Murshidabad District</b>	2,091	35,519	1,699
<b>Ganga-side Thanas</b>			
Samserganj	104	765	736
Suti	157	869	634
Raghunathganj	128	2,295	1,793
Sagardighi	128	1,078	838
Lalgola	95	853	900
Jiaganj	20	1,392	6,960
Murshidabad	50	1,204	2,408
Berhampore	122	1,947	1,596
Beldanga	145	2,921	2,014
Kandi	78	3,181	4,078
Bharatpur	134	4,666	3,482
	<hr/> 1,141	<hr/> 21,166	<hr/> 1,856
<b>Non-Ganga area of the District</b>	950	14,353	1,511

We have included the thanas of Kandi and Bharatpore, though they do not touch the Bhagirathi, as they are within the eight-mile zone. There is a tradition that the Bhagirathi once flowed west by the channel of what is now the river Babla.

The percentage of Brahmans along the riverside zone is 61.0 per cent.

Comparative density is  $1856 : 1511 = 1.23 : 1$ .

The hinterland from the Ganga in Murshidabad is very thin. If Nadia and Murshidabad are taken together, it will give a better picture. Index of riverside areas is 2,370 and of other areas 1,096. Comparative density is  $2.16 : 1$ .

15. Tabulating the results we get the number of Brahmans per 100 sq. miles and 'comparative densities' as :

	No. of Brahmans per 100 sq. mile	Comparative density
24-Parganas	9,592	13.2
Howrah	69,186	8.0
(Howrah excluding City of Howrah)	(20,817)	2.4
Hooghly	24,412	5.5
Bnrđwan	5,135	1.24
Nadia	3,098	3.49
Murshidabad	1,856	1.23

We have not been able to find as yet why the comparative density and the index number of Brahmans has varied so widely from district to district. Industrialization in the first three districts of 24-Parganas, Howrah and Hooghly, which began about 1870 ; modern love of urban life ; changes in the course of the river, and composition of the Brahman population all seem to have played their part.

Further the data we have given and tried to analyze are imperfect in the sense that we have not been able to find out or estimate the number of Brahmans within the eight-mile zone from the Ganga. Sometimes thanas exceeded the limit, and sometimes they are well within it.

The Ganga has changed its course several times within the last four to five hundred of which there are records or references. It must have done so previously, after the Brahmanical revival under the Sena Kings of Bengal (c. 1050 A. D.). In the time of Chaitanya (1485-1533 A. D.) it flowed past the township of Fulia which is now far inland. The town of Nabadwip has been eroded, and the temple erected by Dewan Ganga Gobinda Sinha to mark the birth-place of Sri Chaitanya has been destroyed. The historic battle-field of Plassey has been mostly washed away.

The Ganga is tidal up to Tribeni in Hooghly. It was so during the last two or three centuries at least ; and it has not meandered in the same fashion as it has done in its upper

reaches. Any erosion or change in the river bank is of minor nature, confined to say 50 yards.\* With Tribeni it almost reaches the limits of Hooghly and 24-Parganas districts.

In its passage down from Suti, where the Bhagirathi separates itself from the main stream of the Ganga (which point again is not a fixed one, but has changed several times over a large area) through the districts of Murshidabad, Nadia and Burdwan, it has meanders, bils and baonrs. The number of such ox-bow lakes and abandoned meanders is not negligible. Some of them are more than eight miles away from the present bed.

Administrative arrangements may have marked the true position. For example, if Nabadwip which is on the west bank of the Ganga, is included in Burdwan, the index number of Brahmans would increase from 5,135 to 5,481.

Almost all the temples and halls of worship on both banks of the Bhagirathi from Triveni downstream are post-Mohammedan. They were built because of the presence of the Brahmans locally; and they also induced many Brahmans to come there as priests.

It has been suggested that as the Aryanization followed the river there is a larger number of Brahman along the bank. This may or may not be true.

16. A measure of orthodoxy or otherwise among the Brahmans may be estimated from the following figures. In 1921, the number of Hindus whose principal occupation was recorded as 'Priests, ministers' was 2,73,339. Presumably they were Brahmans; though certain non-Brahmans, such as Dom-pandits Deangsees, acted as priests and ministers. The proportion of such non-Brahmans does not exceed 10 per cent. This is the view of competent observers. The total of Hindus and Brahmans in 1921 was 208,09,146 and 13,09,538 respectively.

The percentage of 'Priests, ministers' among the Hindus is 1.31; and that among the Brahmans is 20.9. Deducting 10 per cent for the non-Brahmans, the percentage of the Brahmans

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\* See *Geographical Review of India*, vol. XIV, no. 1, March 1952, pp. 37-39.



who followed the occupation of priests and ministers is about 19, i.e. roughly about one-fifth followed their traditional occupation.

In 1931 an enquiry was made among members of provincial services on certain social questions. They were classified as orthodox or unorthodox, just as the person described himself. The percentage of unorthodox people among the different castes is :

Brahman	54.4
Vaidya	75.9
Kayastha	82.5
Namashudra	83.5
Other castes	78.9
All castes	<u>69.6</u>

The number of those who were asked such questions was very small, only 382\*.

All that it shows is that Brahmans were more orthodox than other castes. And they are likely to have followed the religious texts more closely than other castes in earlier times.

17. The populations of the several districts and of the thanas bordering the Ganga in 1931, as well as the percentage of the Brahmans in the districts are given below :

District	Population in 1931 (Total)	Number and percentage of Brahmans	
<b>24-Parganas</b>	27,13,374	1,07,251	3.95
A. Areas adjoining the Ganga	9,39,712	58,628	6.24
B. Areas away from the river	17,74,162	48,623	2.74
<b>Howrah</b>	10,98,867	79,909	7.27
A. Areas adjoining the Ganga	3,62,886	39,436	10.87
B. Areas away from the river	7,35,981	40,473	5.50

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\* See *Bengal Census Report 1931*, p. 396.

<b>Hooghly</b>	<b>11,14,255</b>	<b>84,172</b>	<b>7.54</b>
A. Areas adjoining the Ganga	2,95,204	38,814	13.15
B. Areas away from the river	8,19,051	45,358	5.54
<b>Burdwan</b>	<b>15,75,699</b>	<b>1,17,421</b>	<b>7.45</b>
A. Areas adjoining the Ganga	3,45,327	27,524	7.97
B. Areas away from the river	12,30,372	89,897	7.31
<b>Nadia</b>	<b>15,29,632</b>	<b>43,425</b>	<b>2.84</b>
A. Areas adjoining the Ganga	4,00,101	25,029	6.26
B. Areas away from the river	11,29,531	18,396	1.63
<b>Murshidabad</b>	<b>13,70,677</b>	<b>35,519</b>	<b>2.59</b>
A. Areas adjoining the Ganga	8,21,014	21,166	2.58
B. Areas away from the river	5,49,663	14,353	2.61

It will be observed that in every district, excepting Murshidabad, the percentage of Brahmans in the neighbourhood of the Ganga is greater than that in areas away as well as that in the district as a whole. This is as should be expected from our knowledge of Brahmans. But we have not been able to find out why there has been a departure in the case of Murshidabad. It is said that there are many Bhuinhar Brahmans in the district who are agriculturists ; and that the Jemo Rajas, themselves Jijhotia Brahmans, settled them in the interior. We record it for what it may be worth, for we have no local knowledge.

## APPENDIX

	Area in sq. miles	No. of Brahmans in 1931	No. of Brahmans per 100 sq. miles	Per cent of Hindus in 1931
<b>Burdwan Division</b>	<b>13,964</b>	<b>5,50,631</b>	<b>2,744</b>	<b>82.85</b>
Burdwan	2,705	1,17,421	4,340	78.62
Birbhum	1,699	46,407	2,731	67.17
Bankura	2,625	1,02,939	3,921	90.99
Midnapur	5,245	1,19,783	2,284	89.06
Hooghly	1,188	84,172	7,085	82.93
Howrah	522	79,909	15,308	78.30
<b>Presidency Division</b>	<b>17,853</b>	<b>4,28,807</b>	<b>1675</b>	<b>51.24</b>
24 Parganas	5,257	1,07,251	2,040	64.20
Calcutta	33	1,59,112	4,82,157	68.71
Nadia	2,881	43,425	1,507	37.53
Murshidabad	2,091	35,519	1,699	43.01
Jessore	2,902	37,197	1,282	37.95
Khulna	4,689	46,303	988	50.22
<b>Rajshahi Division</b>	<b>19,163</b>	<b>1,08,181</b>	<b>391</b>	<b>34.89</b>
Rajshahi	2,609	20,642	791	22.81
Dinajpur	3,948	11,668	296	45.22
Jalpaiguri	2,932	8,655	295	67.53
Darjeeling	1,212	8,791	724	74.12
Rangpur	3,496	18,099	518	28.77
Bogra	1,384	6,928	501	16.35
Pabna	1,818	23,308	1,282	22.99
Malda	1,764	10,090	572	42.17
<b>Dacca Division</b>	<b>14,829</b>	<b>2,53,317</b>	<b>1,181</b>	<b>28.55</b>
Dacca	2,713	70,329	2,592	32.77
Mymensingh	6,237	65,350	1,048	22.89
Faridpur	2,356	55,443	2,353	35.86
Bakarganj	3,523	62,195	1,765	27.65
<b>Chittagong Division</b>	<b>11,692</b>	<b>97,266</b>	<b>575</b>	<b>22.65</b>
Tipperah	2,597	45,583	1,755	24.14
Noakhali	1,518	19,353	1,275	21.47
Chittagong	2,570	32,060	1,245	21.83
C. H. Tracts	5,007	270	54	17.27
Cooch Bihar	1,318	5,153	391	64.32
Tripura	4,116	4,312	105	68.40
<b>Bengal</b>	<b>82,955</b>	<b>14,47,691</b>	<b>1745.1</b>	<b>43.48</b>

# CHIRMARS OF MIDNAPUR

P. K. BHOWMICK

(Received on 30 June 1961)

## *Introduction*

NO attempt has been made in the past to study the cultural and economic life of the Chirmars of Midnapur. The data collected so far is insufficient to present a comprehensive picture of their life. Their alarming decay in numbers within a short time made the writer examine the causes responsible for the disintegration of the tribe. These people speak in a distorted, rather corrupt form of Bengali and, as a result, it is easy to work among them. The results of the study are recorded below.

The Chirmars are a very small community now represented only by 36 families in Midnapur town, consisting of 127 individuals. A very small number are also found at Kalyanagarh near Bagnan railway station in the Howrah District. The Chirmars are now mainly concentrated at Chirmarsai, a small ward in the town of Midnapur. The topography of this place is composed of lateritic or gravel soil. Jungles are found here and there all over the western part of the district.

## *Traditions of Origin*

They are generally regarded as Hindu, but in the District Gazetteers the tribe has been equated with the Lodhas. There is practically no reference to them in any other written record.

The term *Chirmar* is probably derived from the Hindi words *chiria* meaning 'bird' and *mar*, a 'killer'. In fact, some of the Chirmars maintain that they are shikaris with the traditional occupation of trapper or hunter.

According to some of the older informants like Suren (aged 68) and Sukumar (aged 56), whom I contacted first, the Chirmars are an old branch of the Savara or Kirata group, frequent references to whom are found in epics like the *Ramayana* and the *Mahabharata*. The traditional home of the particular group of people was the forest tracts, and their sole occupation was the collection of forest produce and hunting by snaring or shooting. References to Kalketu Vyadha are found in the *Mangal* literature, and the Chirmars or the Shikaris of Midnapur claim that they are the descendants of Kalketu, the Vyadha or trapper.

### *Population and Age-Group*

The total number of Chirmar families in the settlement in Midnapur town is 36, the population being 127 in all. The distribution of population sex-wise and age-wise is as follows.

TABLE 1

Age	0-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40	41-45	46-50	50 and over	Total
Male	8	14	5	7	7	5	5	9	4	3	6	73
Female	5	10	2	5	3	7	7	5	1	2	7	54
Total	13	24	7	12	10	12	12	14	5	5	13	127

The excess of male population over female almost in every age-group is disquieting.

### *Occupation*

Not long ago the Chirmars lived mainly by hunting and selling meat and skins in the market. It is very difficult for them now to live and even as before. The majority have been compelled to take to other occupations as shown in the table below.

TABLE 2

Govt. Service (Bearer)	Hunting	Prepara- tion of rod and line for fishing	Prepara- tion of lime from snail shells, etc.	Car- pentry	But- chery	Misce- llaneous, day- labourers, etc.
1	11	2	2	14	3	11

Almost all families have a muzzle-loader, an ordinary type of gun, to retain which a nominal licence fee of Rs. 3 per annum has to be paid. The details of the other features of their economic life are given below.

### *Education*

So far as education is concerned, only two among the older generation, namely, Sukumar Shikari (56) who works as a peon in an office and Ramkumar (50), are just literate. All the three sons of Sukumar are also partially literate, the entire group having only 5 people who know how to read and write.

### *Material Culture*

The settlement of Chirmarsai previously belonged to a Moslem landholder named Amdur Mia, who later on sold it to Narayan Sarkar of Mahatabpur, a village near the town. Amdur Mia did not realize any rent from the Chirmars. But Narayan Sarkar levied a very small rent which did not exceed Rs 2 annually per family. The zemindari system having been abolished now by law, they have to pay the rent fixed for individual families directly to the State Government.

In addition to this, the Chirmars have to pay municipal taxes, although in return to their contribution, they hardly get any amenities worth the name. Before each election a promise is made by contestants in the Municipal election that they would set up a few light-posts, and provide sanitary arrangements and water supply in the area, etc. etc. But nothing tangible has happened up till now. They have not even been provided by the Municipality with a single public urinal or privy. Their huts are arranged on two sides of a narrow lane. Some of the huts are huddled together in a clumsy fashion for want of space. A few families own cattle and goats. There is practically no arrangement for drainage in the whole settlement. Huts have generally mud walls with thatches of straw. Only two persons in the whole community have pucca houses with corrugated iron roofs. They

have very few cooking utensils or bedding or household furniture. Those who work as carpenters in different parts of the town earn from Re. 1.50 to Rs. 2.50 daily provided work is available. This class of people hardly remain unemployed. They shape logs, saw planks, build doors, windows, shutters and other items mainly used for construction of houses. The proprietors of carpentry shops supply them with necessary tools for work.

Their next important profession is butchery. To start a butcher's shop requires an initial investment of Rs. 30 to Rs. 50 for purchasing goats and knives etc. Two persons who are in the trade earn between Rs. 45 every month. Another two run two depots of lime prepared from shells of snails. Snails are collected from fields and after piling them up in large heaps, they are fired with wood and converted to lime. The lime thus extracted is used for white-washing and other building purposes.

Manufacture of angling rods and line has been taken up as a profession by two individuals. They purchase green bamboo from the neighbourhood and heat these over an open fire for seasoning and straightening. After cutting into shape, they fix the thread and hooks and apply a varnish before sale.

Hunting or rather fowling, is the source of livelihood of eleven people belonging to the community; though others also possess hunting appliances like muzzle-loaders. This is a very uncertain and exacting profession, and as such, has been given up by the majority.

Women never do any outdoor work. Only one woman was found to serve as a maid-servant in the family of a local gentleman on a monthly salary of Rs. 8.

There are no particular standard for their dresses and ornaments. They use any dress, modern or old-fashioned, but the women have a preference for rolled gold or silver ornaments. A few women had tattooed floral designs on their arms.

The general economic life or material life of the Chirmars is of a low standard. Poverty, disease, ignorance and exploitation have reduced them to a pitiable condition. They cannot afford to send their children to school.

## *Social Organization*

The tribe claims to be a Hindu caste and acknowledges the supremacy of Brahmans whose services are required in rituals like birth, marriage and death, and several religious festivals or worships. An actual assessment of their social status cannot be made without further detailed enquiry into their manners and customs. This is all the more difficult because they live in virtual isolation in an urban settlement where the actual social status is hard to assess.

They are an endogamous people and all claim to belong to the Kashyapa gotra. They do not, however, follow the restrictions or observe the precepts of the gotra devata rigidly. They do not have any totem either. Even the older generations cannot interpret their gotra-name or its significance, and the meaning of observances or rituals connected with the gotra.

## *Family*

Generally two types of family are found among the Chirmars. The first is a simple family consisting of parents, unmarried children and sometimes widows or widowers with their unmarried children. The second is a joint or extended family where parents with married children and grandchildren, or sometimes with married daughters with their husbands, live together. The following were the numbers of such families :—

(1) Simple family	27
(2) Joint or Extended family	9
	<hr/>
Total	36

Out of the 27 simple families, 4 consist of only one adult member and two aged persons, a male and a female. Of the 9 joint or extended families, 3 have their old mothers living together and, in one family, the deceased elder brother's wife with her children are maintained. In one case, a daughter-in-law stays with her father-in-law. The total population being 127, the average number of members per family is 3.5.



The Chirmars have a patriarchal society. After marriage, the wife goes to live with her husband in the abode of her father-in-law. In one case, however, it was found that after marriage the eldest son of a certain family lived separately from his father. But the common custom is that after the death of the father the grown up and married sons set up separate establishments. Such an arrangement may require shifting elsewhere or living in the same premises by erecting partition walls.

In Chirmar society, the property of a father is inherited by his sons. Ornaments etc, which are mainly the asset of the mother, are given or may be presented to her daughters during her lifetime. Normally, after the mother's death these are inherited by the wives of the sons.

Within the family, the eldest male is regarded as the head and his directions are followed respectfully by all. Husbands are respected by the wives. The head of the family has to maintain the whole establishment, but the grown-up sons assist the father in his task by pooling together their own earnings and making over the entire amount to their father. The nature of parent-child relationship changes with advance in age and status of the children. In early boyhood, the child is treated with great affection, but as soon as he becomes an adult, he has to co-operate with and help his father in all his activities.

### *Marriage*

Marriage between kin is strictly prohibited. A study of the genealogical descents revealed that parallel cousin marriage is altogether absent. In one case, however, it was found that a man had married the daughter of his maternal uncle. Before final selection of the bride, the groom's father takes care that the bride does not belong to the family of the groom's mother directly, to observe rigidly the social taboo of prohibition of the first cousin in marriage.

Out of 29 marriages studied 17 were found to have married in the same village, 9 at Kalyanpur, 1 at Burdwan where there is no Chirmar family at all, and 1 married at Nayagram, a village within the same district. Rakshab Shikari (aged 46)

married a woman of the Majhi Kaivartta caste from a village in Keshpur Police Station. Thus it is found that about 60% marriages were performed within the locality.

The age of marriage varies from 11 to 13 in the case of the bride and 18 to 25 in the case of the bridegroom. Usually the first approach in negotiation is made by the bride's father. The headman of the village is consulted and sometimes he is requested to be present at the final settlement. When the parties come to an agreement about terms, a date is fixed for the wedding ceremony. To celebrate the marriage, an Acharya Brahman or priest is consulted, who is paid a small amount after service. The relatives of both parties are invited to attend the function. The village headman is given a royalty generally consisting of 7 betel-nuts. A wedding platform is constructed in the house of the bride's father and a Brahman solemnizes the marriage. No money is paid as bride-price. Previously, a dowry had to be offered to the groom by the bride's father. This custom has almost disappeared now, as these poor people cannot afford to give presents to their son-in-law during marriage, although dowry is still in vogue among upper caste Hindus in the vicinity of the Chirmar settlement. In one case, a son-in-law lives in the house of his father-in-law, as the latter has no son. This custom is similar to adoption and is known as 'having a g h a r-j a m a i'. Due to the custom of child marriage, the bride is kept in her father's place till she attains puberty. Before she is introduced into the family of her husband as one of its members, a second nuptial takes place which is called P u n a r b i b a h a or re-marriage. A BARBER is called in to conduct a part of the function.

### *Death and Funeral*

In serious cases of illness, doctors are geneally consulted and systematic treatment arranged according to the financial resources of the family. If a death occurs, the dead body is taken to Mahatabpur burning ghat (under the Municipality of Midnapur) for crematton. Generally the expenses vary from Rs. 12 to 15 now-a-days. But in such a case, one can apply

to the Chairman of the Municipality through the Ward Commissioner for financial assistance for which the Municipality has adequate provisions. In the normal course, such help is promptly extended by which the mourners get all the facilities and help needed.

Previously a full month was considered as the mourning period or period of defilement. The custom is now to observe mourning and ceremonial defilement for 13 days only. Just after the termination of mourning all the relatives assemble in the house of the deceased and BARBERS are called in to shave the members of the bereaved family. A Brahman performs the s r a d d h a ceremony, which also includes a ceremonial feast given to members of the community on a scale which one's purse would permit.

### *Religion and Magic*

The Chirmars are more a hinduized community now, but the Hinduism of the upper castes is unknown to them. They worship B a r a m C h a n d i or G a r a m C h a n d i in the image of a votive terra-cotta elephant. Previously, this Baram Chandi was worshipped under a tree. But now it has been installed in the house of Thura Shikari as the tree fell down during a cyclone. This deity is generally worshipped in the months of Magh and Chaitra. For the worship of Baram, Thura does not require the services of a Brahman.

Besides this important deity, the Chirmars also worship a deity called N i t a i-G a u r a n g a. It has been installed in a temple built of brick and is worshipped by a Brahman of a low order named Kshetra Thakur. He comes to the temple every morning to offer sweets to the idol. For his services, he receives a salary of Rs. 6 per month. Some landed property has been endowed by a certain widow to meet the expenses of regular worship of the deity.

M a h a v i r or H a n u m a n is another deity worshipped by the Chirmars. A man-sized idol of Hanuman was installed about a decade ago. This deity is worshipped by Thura Shikari. Besides these, they send their subscriptions to the local Puja Committee each year for the S i t a l a p u j a.

Magical practices are solely employed for the cure of diseases, etc. This is the exclusive profession of a local shikari. He gives amulets, talismans, etc. to diseased persons who seek his help. For his services he receives a few annas as professional fee or remuneration. This magician worships Manasa on the last day of the month of Aswin (Sept.-Oct.) to keep his magical powers in tact. The art of magical treatment of diseases is gradually being disowned by the Chirmars belonging to the present generation. The Chirmars now go to the local hospital for treatment.

### *Political Structure*

The function of the panchayat of the Chirmars is mainly to discuss the different social and religious activities, breaking of the caste tradition and changing the orthodox pattern of social behaviour. The head of political and social affairs is called the M u k h i a. The post is more or less hereditary, and the ablest son of a deceased Headman is entitled to hold the office as successor. The activities of the Headman involve looking after the social and religious affairs of the community. The following will be of interest as to how he functions.

One Rakshab had a Kaibarta woman as concubine. The Mukhia ruled that his family should be ostracized. This was done and the results were none too happy for Rakshab. The two sisters of Rakshab had once close intimacy with two men outside the caste, who were later sentenced for six months of imprisonment on certain charges. The village Headman, in consultation with the elder villagers, ordered their banishment and the people drove them out from the settlement.

In religious affairs, also, the Headman has to guide the community and arrange for the collection of subscription for ceremonial purposes. Prior to the solemnization of a marriage, his consent is necessary and a royalty is paid to him by way of presentation of 7 betel-nuts, sometimes along with a new piece of cloth.

The Headman has an assistant called C h h a r i d a r who usually helps him in the performance of specific duties. He is

also given a royalty of 7 betel-nuts during a marriage ceremony.

Another functionary is the D a k u a. He is the village messenger who conveys the directives of the Headman to the villagers who constitute the political organization of the community. The Dakua also receives 25 naye paise as his perquisite during marriage.

### *Conclusion*

The Chirmars are regarded as the original settlers of Midnapur when the land was covered by jungle. With the passage of time, their territory has been absorbed in the town and they have drifted into an entirely new situation. Closer contact with a more civilized group of people has made some of them give up their primitive profession of fowling and trapping. They have now taken up various occupations and trades to make a living, But the loss of traditional occupations has created a complex problem for the Chirmars which has made their life harder than before.

# A STUDY OF SOME ASPECTS OF STRUCTURAL VARIATION AMONG IMMIGRANTS IN DURGAPUR, WEST BENGAL

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**A**S part of a programme of examining the role of industrialization on society, a preliminary study of several new growing townships at Durgapur, West Bengal, was made in 1958. The townships are (a) Damodar Valley Corporation (D.V.C.) township, (b) Coke Oven township and c) Steel township. Because of the maintenance of the D.V.C. barrage on the Damodar River, the establishment of the West Bengal Government's coke oven and by-product plants and the construction of the Central Government's steel plant at Durgapur, the above three townships within a circle of about 12-mile radius have come into existence since 1951. Among them, the D.V.C. township was set up in connection with the barrage-cum-irrigation project during the First Five-Year Plan period. At the time of the survey people were found still coming and settling themselves, particularly in the coke oven and steel townships, which were then still in the formative stage. The preliminary study of the immigrants of these townships had the objective to investigate whether the settlers in question showed any structural variation from the societal aspect which may, on the other hand, influence the character and working of the society evolving out of their participation. This study, therefore, was envisaged as a preamble to the study of social relations in a new society, pointing out whether or not structural variations suggest formation, at this initial stage of urban development, of different social groups.

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2. Such variations have been studied, and are noted below as they may have some relevance to the general topic entitled *Sociology in relation to Planning in India*.

3. For the purpose of preliminary study the scope of a pre-pilot survey at Durgapur was restricted only among the persons who were found, at the time of survey, to occupy the Government quarters (houses) in any one of the three townships, being connected with the maintenance work of D.V.C. barrage or project work of coke oven plant or steel plant. Under this condition, the large band of daily labourers who were found living in labour camps (situated very near the work sites) and not in Government quarters was not included within the purview of the pre-pilot survey. On the other hand, the dwellers of the Government quarters who were actually surveyed, are either Government employees and their dependants or such non-Governmental personnel as were engaged in the construction work of the plant projects under various construction and engineering firms. The latter ones were staying largely in the steel townships in the Benachiti area of Durgapur. The total number of households thus surveyed was 1848; the households referring to the co-resident and commensal units in the Government quarters (to each individual in mess and barracks).

4. Only analyzing the data, in terms of the heads of households, it is found that the Bengalis alone account for 61.20 per cent of the total and, as such, the Bengalis appear as the single major group in Durgapur of 1958. Though the newly developing industrial centre of Durgapur is in West Bengal, yet the townships are not found to contain Bengalis only or even in the majority. A significant proportion of non-Bengalis (38.80 per cent) is also found in the town. These non-Bengalis are, on the other hand, represented by Biharis (12.94 per cent), South Indians (8.28 per cent), Other Indians (9.85 per cent), Nepalis (3.46 per cent), American (0.05 per cent) and Europeans (4.22 per cent).

5. It is further interesting to note that 59 out of 100 households surveyed in the Durgapur townships, have migrated from

within the state of West Bengal. From the neighbouring state of Bihar, 22 out of 100 have come to Durgapur. On the other hand, Bengalis and Biharis have migrated from the state of Bihar more or less in an equal strength, the proportions being 9.80 per cent and 9.58 per cent respectively.

6. Moreover, it may be pointed out here that of all heads of households, Bengali immigrants from within and outside the state of West Bengal account for 47.62 per cent and 13.58 per cent respectively. In contrast to this, non-Bengali immigrants from within and outside the state of West Bengal constitute 11.85 per cent and 26.95 per cent respectively. In other words, it can be stated that out of the total number of persons who have come from within the state of West Bengal, one-fifth are constituted by non-Bengalis and the rest by Bengalis. On the other hand, of all the persons who have migrated to Durgapur from outside West Bengal, Bengalis alone account for one-third of the total, the rest being the non-Bengalis. Among Bengalis who have come from outside West Bengal (13.58 per cent), it is noted that they have, however, been attracted from the neighbouring state of Bihar more (9.80 per cent) than from other states of India and outside India and West Bengal. It is interesting to find that as many as 181 Bengali households and 177 Bihari households have come only from Bihar (vide Table 1).

7. What has been pointed out in paras 5 and 6 may be again emphasized in relation to the results of further analysis, namely, (a) for every 100 Bengali migrant-households 78 and 16 are found to have immigrated from West Bengal and Bihar respectively. From outside these two states, they have come, of course, not negligibly (6.19 per cent). Here it is sociologically interesting to note that the new industrial town of Durgapur has offered scope for fruitful settlement to as many as 251 (22.19 per cent) Bengali households coming from West Bengal; (b) among Biharis, for every 100 migrant households one-fourth have come to Durgapur from within West Bengal. Those who have come from the state of Bihar account, of course, for 74.06 per cent of the



total number of Biharis ; (c) for every 100 Indian households other than Bengalis and Beharis, 38 have, again, come from within the state of Bengal. A little more than half of the total number of the Other Indian households have come, in fact, from outside West Bengal and Bihar ; (d) of all the non-Indian households 22 out of 100 are found to have migrated to Durgapur from West Bengal again. Slightly less than two-third of the total number of non-Indian households have, indeed, come from outside India.

8. Thus, it is observed that a significant portion of each group of households characterized by Bengali or Bihari or Other Indian or non-Indian attribute, have, in fact, migrated to the newly developing industrial town of Durgapur from within the state of West Bengal, indicating thereby that the attraction of the new townships had not, at the time of investigation, gone sharply far beyond the state of location of the said industrial projects. It means, on the other hand, that spatial movement of the gainfully employed persons and their dependants who were surveyed in Durgapur, was restricted to a large extent within the geographical boundaries of the state of West Bengal.

9. The townships in question have been populated largely by people coming from urban and city areas and not from rural areas. There is also the interesting fact that very few people living within 10 miles of Durgapur have settled themselves in this town. On analysis it is found that only 0.54 per cent of the total number of heads of households surveyed, are represented by those who have been born within ten miles of the townships. Moreover, in every 100 households, a little less than two-third are found to have come from urban areas, only 39 out of 100 are from rural areas.

10. In this context it is interesting to note that Bengalis are found to have migrated mostly from urban and city areas (38.42 per cent) to rural areas. Among non-Bengalis also the majority have come from urban areas, but comparatively in a lesser strength (22.84 per cent) than Bengalis. Again, among the non-Bengali group, South Indians and Other Indians are particularly more from urban areas than

Biharis and Nepalīs who hail mostly from rural areas (vide Table 2).

11. Of all Bengali households only 37 out of 100 are found to have migrated from rural areas and the remaining 63 are from urban areas, whereas of the total of the Biharis, as many as 65 out of 100 have come from rural areas. For every 100 South Indians, 78 have come from urban areas. A little more than one-third of the total number of Other Indians are, on the other hand, from rural areas. Nepalīs have also come largely from rural areas (62.50 per cent). None of the Europeans come from rural area (vide Table 3).

12. It is clear from the above findings that there is not, thus, a sharp change in the mode of life of these people of the townships from the one to which they were accustomed before coming to Durgapur. Significantly, urban life in past was the most predominant phenomenon for South Indians and then for Other Indians and thirdly for Bengalis and lastly for Biharis who have come mainly from rural areas unlike the others, except Nepalīs.

13. Differences in the above respect by religious and caste affiliation of the people who have come from different states to Durgapur, is of further interest. Among Hindus, Brahmans have come proportionately more from urban areas than non-Brahmans. On analysis it is found that 18.07 per cent out of the total proportion of Brahmans (22.11 per cent) and 32.47 per cent out of the total proportion of non-Brahmans (58.44 per cent) have migrated from urban areas. On the other hand, Muslims are found to have come proportionately more from rural areas than urban areas. As a matter of fact, of the total number of Muslims found in Durgapur, slightly more than half are from rural areas. Christians are in a majority from urban areas, only 0.92 per cent among them having come from rural areas (vide Table 4).

14. On further analysis it is found that out of 100 Hindu Brahman households as many as 67 have come from urban areas, whereas in this respect only 56 out of 100 Hindu non-Brahman households are from urban areas. In contrast to Hindus, among

Muslims 53 out of 100 have come from rural areas. 89 out of 100 Christians have come, on the other hand, from urban areas. In this connection it is significant that urban life in the past was most conspicuously a dominant feature for Christians and then for Hindu Brahmans and thirdly for Hindu non-Brahman and lastly for Muslims.

15. 'Physically, the mere fact of separation—of the migrating youth from his parents, the migrating husband from wife and children, or the migrating conjugal unit from the wider kinship group—is itself a disruption of existing family life.'<sup>1</sup>

Keeping this sociological fact in view, it would perhaps be worth while to examine in what way the respective heads of households have, on migrating to Durgapur, organized their family life in order to adapt themselves to the new industrial environment. On analyzing the family background of the dwellers of three townships it has been found that 49.19 per cent have come from extended (joint) families, whereas 49.29 per cent from simple families. Only in 1.52 per cent cases the family background could not be ascertained.

16. It is interesting to find that a large proportion of the town-dwellers lived, at the time of investigation, only by themselves without any kinsfolk. Such single member units constitute slightly less than two-thirds of the total number of households surveyed. But considering the formative stage of the townships, especially the steel township in 1958, such high concentration of persons living only by themselves without any kinsfolk is quite understandable. Among these persons again, relatively speaking, there were more married among Biharis and more unmarried among Bengalis. The presence of such a high number of persons who lived alone by themselves without any kinsfolk is sociologically interesting for further study. On the other hand, simple family units among the town-dwellers account for 22.35 per cent of the total, whereas extended (joint) families constitute only one-twentieth of the total. Married couple-units account

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<sup>1</sup> United Nations Bureau Of Social Affairs : *Report On The World Social Situation, 1957*, p. 37.

for 6.17 per cent. Further, it is found that among the people concerned, non-familial units alone account for 63.85 per cent, while family units are 36.15 per cent only. Thus, those who were living with their relations have formed largely a simple family, but here again it is seen that Bengalis have relatively formed more extended (joint) families than others (vide Table 5).

17. Considering the concentration of only the family units—simple and joint—separately among Bengalis, Biharis and others, it is found that the highest concentration of joint families is among Bengalis (20.54 per cent) and the minimum is among South Indians (6.15 per cent). Only 11 out of 100 family units among Biharis are extended families, this proportion being the second best concentration next to that of the Bengalis. Other Indian joint families account for 8.62 per cent out of their total number of family units. Significantly, the simple families were the most predominant feature among Nepalis and Europeans (100.00 per cent) and then among South Indians (93.85 per cent), and thirdly among Other Indians (91.38 per cent), and fourthly among Biharis (88.52 per cent) and lastly among Bengalis (79.46 per cent).

18. Such variations in the family organization of town-dwellers can also be pointed out with respect to the religious and caste affiliation of the Hindus and others and these Hindus constitute the major bulk (85.55 per cent) of townspeople. As far as the concentration of the simple and joint family units is concerned, it is interesting to note that Hindu Brahmans account for as many as 18.48 per cent for joint families, this proportion being the highest among all. In this respect the Hindu non-Brahmans account for 15.52 per cent for joint families. Thus, among Hindus it is found that the Brahman group still maintained joint-family life in Durgapur more than non-Brahmans. But it is quite interesting to note in this connection that among Muslims 24 out of 100 family units are joint families. The Muslims are, thus, distinct from the Hindus, in having comparatively more joint families than are found among the latter.

19. On further analysis it is found that of the individual

total of the Hindu Brahmans, the proportion of persons who were unmarried and living alone without any kinsfolk is the highest (35.53 per cent). In this respect, such unmarried single persons out of the individual total of the Hindu non-Brahmans account for 34.82 per cent. Thus, the proportion of unmarried persons living without any kinsfolk is found to occur nearly equally among Hindu Brahmans and non-Brahmans. Persons who were married but living alone occur comparatively more among Hindu non-Brahmans (32.04 per cent) than Brahmans (21.36 per cent); whereas such persons among Muslims account for 68 out of 100 cases. Again in 27 and 8 cases out of 100, Hindu Brahmans show simple and joint families respectively, whereas in 19 and 5 cases out of 100 Hindu non-Brahmans account for simple and joint families respectively. In contrast to Hindus, Muslims constitute 12 simple families and 5 joint families out of every 100 family organizations occurring among them. But among Christians it is the simple family that is most frequent (33 out of 100 family units). Thus, it may be summarized by stating that the simple and joint families are found to occur comparatively more among Hindus than non-Hindus (vide Table 6).

20. The Durgapur townships in 1958, were inhabited predominantly by those who had moved in from urban areas of West Bengal; Bengalis in bulk and the people of other states of origin also not in insignificant numbers. Variations are, of course, present among these new citizens, the salient features of which are as follows.

21. Bengalis who form the major bulk of the town-dwellers, are found to have migrated largely from within West Bengal and more from urban areas. Bengalis have formed comparatively more joint families than others. Biharis, the second largest among town-dwellers, have come from their own state more and largely from rural areas. They show joint families in a lesser strength than what is found among Bengalis. Though South and Other Indians have mostly migrated from urban areas, Other Indians coming from rural areas are comparatively more than rural South Indians.

All of them are found to have formed more simple families than joint families.

22. All those who have migrated to Durgapur are predominantly Hindu. Among Hindus, Brahmans show relatively more joint families than non-Brahmans. These Brahmans have, on the other hand, come comparatively more from urban areas than non-Brahmans. Muslims are found to have migrated in the majority from rural areas, and they have formed relatively more joint families than the Hindus. Christians have come very largely from urban and city areas and they are found to form simple families in the majority of cases. Considering the above characteristics, Bengalis as well as Hindu Brahmans may, thus, be differentiated as social groups distinct from the other groups found in Durgapur.

TABLE 1

**Distribution of different types of migrants among Bengalis, Biharis, South Indians, Other Indians, Nepalis and Europeans of Durgapur.**

State of origin	State of West Bengal	State of Bihar	Migrant from		Total
			Other States of India	Other States outside India	
(1)	(2)	(3)	(4)	(5)	(6)
1. Bengali	880	181	42	28	1131
2. Bihari	60	177	—	2	239
3. South Indian	61	14	73	5	153
4. Other Indian	66	13	99	4	182
5. Nepali	26	15	—	23	64
6. European	6	3	2	68	79
7. All people	1099	403	216	130	1848
Percentages of total migrants					
8. Bengali	47.62	9.80	2.27	1.51	61.20
9. Bihari	3.25	9.58	—	0.11	12.94
10. South Indian	3.30	0.76	3.95	0.27	8.28
11. Other Indian	3.57	0.70	5.36	0.22	9.85
12. Nepali	1.41	0.81	—	1.24	3.46
13. European	0.32	0.16	0.11	3.68	4.27
14. All people	59.47	21.81	11.69	7.03	100.00

TABLE 2

**Distribution of Bengalis, South Indians, Other Indians,  
Nepalis and Europeans by the category of area  
of migration in Durgapur,**

State of origin	Area from where migrated			Total
	Rural	Urban	City	
(1)	(2)	(3)	(4)	(5)
1. Bengali	421	421	289	1131
2. Bihari	156	49	34	239
3. South Indian	34	66	53	153
4. Other Indian	65	58	59	182
5. Nepali	40	15	9	64
6. European	—	32	47	79
7. All people	716	641	491	1848
Percentages of total migrants				
8. Bengali	22.78	22.78	15.64	61.20
9. Behari	8.44	2.66	1.84	12.94
10. South Indian	1.84	3.57	2.87	8.28
11. Other Indian	3.52	3.14	3.19	9.85
12. Nepali	2.26	0.81	0.49	3.46
13. European	—	1.73	2.54	4.27
14. All people	38.74	34.69	26.57	100.00

TABLE 3

**Percentage distribution of heads of households to the individual  
total of Bengalis, Biharis, South Indians, Other Indians,  
Nepalis and Europeans over the categories of  
area from where they migrated.**

Area from where migrated	Bengali	Bihari	South Indian	Other Indian	Nepali	European
1. Rural area	37.22	65.27	22.22	35.71	62.50	—
2. Urban area	37.22	20.50	43.14	31.87	23.44	40.51
3. City area	25.56	14.23	34.64	32.42	14.06	59.49
4. All areas	100.00	100.00	100.00	100.00	100.00	100.00
5. No. of head of household	1131	239	153	182	64	79

TABLE 4

**Distribution of the religious and caste groups over different categories of area of migration.**

Area from where migrated	Religion and caste group					Total
	Hinduism		Islam	Christianity	Other religions	
	Brahman	Non-Brahman				
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Rural area	167	480	50	17	2	716
2. Urban area	204	349	14	69	5	641
3. City area	130	251	30	76	4	491
4. All areas	501	1080	94	162	11	1848
Percentages of total migrants						
5. Rural area	9.04	25.97	2.71	0.92	0.10	38.74
6. Urban area	11.04	18.89	0.76	3.73	0.27	34.69
7. City area	7.03	13.58	1.62	4.12	0.22	26.57
8. All areas	27.11	58.44	5.09	8.77	0.59	100.00

TABLE 5

**Distribution of different forms of family organization among Bengalis, Biharis, South Indians, Other Indians and Others in Durgapur (percentages to the total given in the parentheses).**

Form of family	Bengali	Bihari	South Indian	Other Indian	Nepali	European	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. Single member (Unmarried)	463 (25.06)	26 (1.41)	56 (3.03)	39 (2.11)	6 (0.32)	5 (0.27)	595 (32.20)
2. Single member (Married)	257 (13.90)	147 (7.96)	31 (1.68)	84 (4.54)	26 (1.41)	23 (1.24)	568 (30.73)
3. Single member (Widowed)	7 (0.38)	5 (0.27)	1 (0.05)	1 (0.06)	2 (0.11)	1 (0.05)	17 (0.92)
4. Married couple	35 (1.89)	16 (0.86)	12 (0.65)	16 (0.87)	11 (0.60)	24 (1.30)	114 (6.17)
5. Simple	260 (14.07)	32 (1.74)	42 (2.27)	37 (2.00)	16 (0.86)	26 (1.41)	413 (22.35)
6. Extended (joint)	83 (4.49)	7 (0.38)	4 (0.22)	5 (0.27)	— (—)	— (—)	99 (5.36)
7. Other forms	26 (1.41)	6 (0.32)	7 (0.38)	— (—)	3 (0.16)	— (—)	42 (2.27)
8. All forms	1131 (61.20)	239 (12.94)	153 (8.28)	182 (9.85)	64 (3.46)	79 (4.27)	1848 (100.00)



TABLE 6

**Percentage distribution of different forms of family organization  
to the individual total of each religious and caste  
group found in Durgapur.**

Form of family organization	Major religion and caste affiliation				
	Hinduism		Islam	Christianity	Other religions
	Brahman	Non-Brahman			
(1)	(2)	(3)	(4)	(5)	(6)
1. Single member (unmarried)	35.53	34.82	9.57	19.75	—
2. Single member (married)	21.36	32.04	68.09	29.01	36.36
3. Single member (widowed)	1.00	0.92	—	1.23	—
4. Married couple	4.19	5.65	3.19	16.67	18.18
5. Simple	27.15	19.26	11.70	32.72	45.46
6. Extended (joint)	7.78	5.00	5.32	0.62	—
7. Other form	2.99	2.31	2.13	—	—
8. All forms	100.00	100.00	100.00	100.00	100.00
9. No. of households	501	1080	94	162	11

# ATTITUDE TOWARDS CONTRACEPTIVE METHODS

S. N. SANYAL

(Received on 1 March 1962)

IN the last communication there was a discussion regarding attitude towards contraception.<sup>1</sup> From our survey over a long period it was determined that the attitude towards the necessity of using contraceptive precautions was as rational as expected. Two important factors might be held responsible for arousing this consciousness in general, namely, the growing economic pressure and rapid advance in health services and enforcement of hygienic measures. Infant mortality has been very much reduced, malaria has been practically stamped out, epidemics have been controlled to some extent, and finally the importation of wonder drugs has contributed much towards the saving of lives. The establishment of health centres even in remote villages and of maternity and child welfare centres all around prevent the loss of many mothers and children. As a result more people are getting chances to live and that for a longer period. In India the development and progress, initiated by Five-Year plans has been very rapid. Steel projects, irrigation schemes, fertilizer manufacture, production of commodity goods etc. have no doubt contributed much to the progress. But owing to want of experience, dearth of experienced and trained hands and too much dependance on foreign experts and introduction of highly technical automatic modern machinery, there is an obvious maladjustment which has resulted in higher cost of production and increased selling price, on the one hand, and

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<sup>1</sup> *Man in India*, vol. 39, no. 1, pp. 53 ff.

a drain on our accumulated sterling balances, on the other. Instead of properly utilizing our vast man-power these automatic modern machineries have thrown them out of employment. At the end of each Five-Year plan the unemployment problem, instead of being solved, has grown more acute. The cost of living has increased from day to day. Although the national income has increased sufficiently, the per capita income has practically remained where it was. The increased population growth and the increased cost of living have resulted in an increase in economic pressure which is being realized by people at all levels of society, and has made them conscious about the need of restriction of families.

For this restriction of numbers, there are in use many methods such as mechanical, chemical, biological and surgical. In the present communication, the attitude towards individual methods will be discussed.

(a) Condome or rubber male cap is being used for many years and the results are more or less satisfactory. In Western countries this is comparatively more popular. In those places where premarital enterprise is prevalent, recourse is always taken to this measure. The first experience helps them to be adjusted to its use after marriage. In India also the attitude towards this method is limited only to a small fraction of the educated public and particularly to those who have adopted this measure from the very beginning. Here, the first experience will always count. If this is introduced after some time, this is always resented by one or the other partner with the suggestion that there is no pleasure. But in the case of those users, accustomed from the very beginning, it has been marked that there is no pleasure without it. Out of many such cases, report of one case may be cited here. The couple had one child, 10 years old. The mother centered all her affection over this child to such an extent that slowly psychosis developed in her which eventually culminated into suicidal mania. The medical adviser deciphered after analysis that she longed for a child, and accordingly the husband was discouraged

from the use of condom. This was impossible as the wife resisted it as she was not accustomed without it. Accordingly the husband was advised to make a pin-hole in the condom before use. With this measure, conception followed and the wife has become perfectly normal since then. It was also observed that elderly people, eager for family planning, reported that the female partner resisted its use and also in many cases the wife, already overburdened with a number of children, insisted on its use but was resisted by the male partner.

(b) Cervical cap : This is seldom used now-a-days and the attitude towards it is unsatisfactory. Previously this was used by educated classes in special cases. This was due to the difficulties of proper fitting. In cases of long regular-shaped cervix there is the chance of its remaining in situ and that must be fitted in with the proper size by a gynaecologist. In cases of irregular and small cervix, there is every chance of its slipping. Moreover this requires to be taken out, washed and refitted. This is bothersome and also requires skill. For these reasons this has practically gone out of the list and is seldom recommended.

(c) Jelly : In this case, although often recommended, it is rejected by both the partners for being messy. There is no pleasure at all, and particularly in cases where there is enough of vaginal secretion. In very few cases, this is tolerated particularly in the case of frigid women and in cases where the vaginal secretion is very scanty due to the want of psychological stimulation and in cases where there is disparity of size.

(d) Diaphragm and jelly : The attitude is favourable towards the use of this method among fashionable and well-to-do people. This seems mainly for the purpose of pride and demonstration than for actual liking. This is very successful no doubt and is acceptable to the rich and educated classes in Western countries. In India its use is very much restricted due to many difficulties. This requires a proper fitting by an expert with the proper size, which again requires re-examination after intercourse. Moreover, removal and

re-application requires skill and education. The cost is prohibitive beyond the reach of ordinary poor people. Moreover female folk in general in India, inspite of their intelligence and education, are very shy. In the beginning this was introduced by many family planning organizations in India. People were enthusiastic initially, but subsequently it was discovered that they threw this off and collected it again from the organization, and consequently the organizations were involved in a waste of money.

(e) Foam tablet: This was supposed to be the best and most easily acceptable to all classes of people, particularly the poorer classes. This is cheap and requires less training and intelligence. With this idea, the Government of India import large quantities of foam tablet, worth about 30 to 40 lakhs of rupees in each lot. About 50% of these tablets are wasted through faulty storage, where the foam evolves due to moist condition, the rest being distributed to clinics. In the clinics, patients are taught about the method of use along with other measures, and they are supplied with the tablets either free or at a minimum cost. The cost is negligible, but the success derived from its use is also negligible, which is evident from the census report of 1961. The attitude towards foam tablet is rather of the nature of 'best of bad bargain', when there is no other method suitable for ease of application and also suited to their sub-standard economy. In actual practice they face many difficulties, and irregularities naturally follow. In the majority of families, there are difficulties of accommodation. These tablets have to be introduced at the right moment after a preliminary dip into water, which is often avoided, resulting in failures. Moreover, the emergence of foam and the discharge timing do not often correspond. Also, where the accommodation problem is acute, this measure becomes difficult to adopt, even where there is sufficient motivation. Among the poor, illiterate labouring classes in the tea gardens in the Duars in North Bengal, it was reported by family planning officers that, inspite of repeated instruction, these tablets were swallowed and caused gastric irritation due to the incorporation of phenyl

mercuric nitrate or some other substance in the foam tablet. In the opinion of these labourers, the tablets must be for swallowing after all. This much can be said that these foam tablets are a cheap and handy measure for family planning in India and for this the Government of India have to spend crores of rupees every year even in the present state of acute exchange difficulties. The effectiveness is unknown, as this can be judged from the colossal rise in the population in spite of prolonged distribution and propaganda for the last eight years or so.

(f) Withdrawal method : The method of coitus interruptus was prevalent even in ancient times. Although the attitude towards it is not at all satisfactory and this is not in general use, still it is practised by some. It has been observed that in actual practice it is difficult to adhere to it strictly, and particularly so in the case of young subjects. Constant irritability, bad temper, dissatisfaction and hysteria, etc. are manifested by patients practising it.

(g) Other methods : Douching and other methods, although prescribed previously, are now discouraged.

(h) Biologically active oral pill : It must be frankly admitted that there was a time when prevention of conception by oral medicine was disliked. It was apprehended that the menstrual cycle might be interfered with, or permanent sterility might be induced, or even unwittingly abortion might be brought about. The oral medicine for the prevention of conception might bring about toxic effects either immediate or delayed, and might bring about hormonal imbalance of the system or damage the delicate sex apparatus. With the growth of science, things have changed enormously ; and in the present day the best attitude held is in regard to oral contraceptives. In several conferences, many gynaecologists presented their experience by saying that wherever they discussed the needs and usefulness of contraceptives, they were faced by the unequivocal opinion that nothing except oral pills would do. This was true whether subjects were poor.

and illiterate or rich and educated. Unfortunately, in early days none was available.

During 1949, the preliminary note on the effectiveness of *pisum sativum* (common field pea) as an oral contraceptive was published. This research was started from the clue of some traditional dietary practice enjoined upon Hindu widows. This has also a demographic support. It was already known that the population of Tibet had been steady for the last 200 years. The chief food used by Tibetans are *pisum sativum* and barley, as nothing else is grown there. During 1952, the active principle was isolated and synthesized, and this is m-xylohydroquinone.

After preliminary biological experiments and toxicity determination etc., human trial was instituted in a maternity hospital. The trial was carried out among middle class and lower middle class people. The drug was administered in 300 to 350 mg. doses twice in each cycle, usually on the 16th and 21st day of the cycle. The trial lasted for  $2\frac{1}{2}$  years and the total roll strength went up to 727 after 2 years and was 950 at the end of  $2\frac{1}{2}$  years. This alone is sufficient proof of its acceptability. This oral contraceptive was the first of its kind and the trial was a maiden one; but the population sample was sufficiently high. No doubt, during trial many patients moved out for various reasons, such as change of locality, objections to the use of contraceptives by old and orthodox mothers-in-law; but never due to objection to the method or due to undesirable side-effects. In the beginning, when there was no knowledge of the possibility of prevention of conception by an oral pill, there was suspicion in the mind of users and their guardians regarding its probable harmful effects, such as complete cessation of menstruation or induction of permanent sterility (especially in younger subjects), and other toxic effects, if not immediate but delayed, on the mother or the baby in failure cases. These apprehensions were so much in their mind for the first three months, that the total number of patients remained negligibly small. The patients discussed among themselves their experiences. When failures occurred in spite of two or three

months' treatment, they became convinced at least of the fact that permanent sterility was not going to take place. Since then the number swelled up and had to be limited on account of shortage of supply and increase in the cost of management. It was not possible for one health visitor and one field worker to manage more than 200 patients. With the advice and assurance of Dr. Gamble, who financed the trial, it was further extended and the number increased quickly. A favourable attitude towards the method was reflected by the fact that those failure cases who conceived after 2-3 months or 3-4 months trial, restarted taking the medicine after being confined. Dr. Gamble also reported that for the determination of acceptability of various methods of contraception in underdeveloped countries in different parts of the world, he managed to establish clinics and supplied appliances according to their choice and also provided for one health visitor. After one year he went round for collection of data. To his utter surprise he found that the number of patients in each centre was negligibly small and with a very small number of patient-months unsuitable for statistical evaluation. Moreover, some of them had already been closed down. This was only due to non-acceptability of the methods. Only in the case of the centre in Calcutta, where oral contraceptive pills were administered, the total number of patients in nine months was more than 200 and the total patient-months, more than 700. The statistical calculation by Dr. Gamble showed a very encouraging reduction in the pregnancy rate. This clearly signifies the very favourable attitude towards oral contraceptives which is acceptable to all classes of people. In spite of much unwarranted criticism by uninformed persons, the trial continued for more than two years, exhibiting no side-effects and refuting all charges of abortifacient action, induction of permanent sterility, carcinogenic effect, genetic effects and deleterious effects on the children born in failure cases ; while a reduction of 60% in the pregnancy rate was established. This convinced demographers and advocates of the family planning movement, and at present



they are unanimous in the opinion that without such a cheap and harmless oral contraceptive the population problem can never be solved on a world-wide basis.

The popularity of the clinic and its effectiveness impressed the authorities so much that a second trial was instituted by the Government of India under the aegis of the All India Institute of Hygiene & Public Health in Calcutta. In this trial, patients were divided into two groups, odd numbers receiving the actual medicine and even numbers receiving placebo. The trial continued for two years. The bias was so marked that the control group, receiving placebo and having a very large number of failures, were still eager to accept the method and continued till the end of the trial. After two years of trial the statistical result showed a reduction of 60% in the pregnancy rate in the treatment group compared to that of the control one. In this trial all previous observations of lack of toxicity and other harmful effects on the mother and the child were fully confirmed. The Government of India seem to have become interested in it on account of its effectiveness and cheapness and simplicity of administration; and then started two to three clinics where the same oral pills are being distributed for the last two years.

(i) Another oral pill: Convinced about the possibility and potentiality of oral pills, scientists in the West tried to develop new compounds and also utilize some compounds already in use. Another group of U. S. A. scientists reverted to the use of hormone and utilized norethisterone. This was enovid. In this case the reduction in the pregnancy rate is 90% due to suppression of ovulation. Unfortunately, the pills have to be taken for 20 days in each cycle; but with less than 20 days of administration reduction becomes disproportionately lowered. Moreover, if discontinued, there is every probability of enhancement of pregnancy rate due to rebound effect, which is usual in the case of many hormone treatments. There are also side-effects requiring frequent medical supervision. The cost is prohibitive. Practically 100% reduction in the pregnancy rate with oral pill will no doubt be favoured; and

in such cases there is and will always be the best of attitudes provided there is no side-effect, and if it lies within the means of the poor users as well. In the beginning, enthusiasm might prevail and patients might start using the pills for prevention of conception; but it is very doubtful as to how long this daily administration might be adhered to. In that case, the reduction will fall short of expectation. Even in western countries, it has been reported by many physicians, that in grave cases of anaemia, haematinic pills are taken daily only for a very short period, and after slight improvement in the condition these are often forgotten.

(j) Surgical methods for the prevention of conception permanently by sterilization: The two methods, ligation and vasectomy, seem to be the most easily acceptable of all methods by a group of patients belonging to the upper class and upper middle class, and particularly by younger subjects with two to three children. Due to long-standing propaganda both on the governmental level and also by some gynaecologists, the attitude seems to be very favourable at the onset. Some over-enthusiastic officials favoured by exalted position are liable to dictate policies and formulate plans of action without a consideration of the psychological effects involved. Gynaecologists are liable to look to business interests. Similarly many societies, sheerly for the sake of advertising their benevolence, advocate its usefulness, irrespective of age and the status of the mind. Simple-minded patients, without any knowledge of future reaction and not also told about the far-reaching consequences both physical and psychological, are drawn into the trap simply on account of the temptation of enjoyment without risk of pregnancy.

Some contend that these socio-psychological reactions are only possible in the case of urban people who are usually high strung. On the contrary, it may be said that, whether urban or rural, at least 50% of such cases, especially of the younger age group, are uniformly affected. Only the apathetic and the frigid group of female subjects and elderly patients nearing menopause might escape the consequences. In both these

operations, a distrust and suspicion develops in the mind of the patients and this might even end in psychosis in severe cases.

This is one side of the picture and there is another side. The vanity of a woman lies in the fact that she can conceive, but she will not. The moment she realizes that she cannot conceive, she becomes a wreck. Apart from the psychological reaction the physical change is more serious. The woman after ligation operation (in the way this is performed now-a-days, for greater assurance) loses all pleasure in the sexual act, which becomes more or less a mechanical one. This is fully realized after some time. In the beginning, being unsatisfied, she craves for more ; so much so that it becomes difficult for the husband to oblige her.

The question might be asked as to why this is so. The whole process of sexual union might be divided into 4 stages. (1) The stage or nervous or rather psychological stimulation manifested by secretion from the greater vestibular glands. (2) Stage of excitement caused by the wave of contraction, starting from the end of the tubes progressively reaching the uterus, which starts contracting from fundus downwards reaching the cervix which ultimately contracts and throbs with congestion. This induces a suction action (believed by some physiologists and denied by others). In this stage the female apparently seems lying listless, but in fact she feels the contraction and becomes gradually excited. (3) Stage of orgasm or the stage of maximum excitement when some cervical discharge gushes out into the vagina which also undergoes a rhythmic contraction and dilation. This stage is manifested by certain movements on the part of the female. (4) The stage of relaxation and the stage of maximum pleasure. The second stage or the stage of rhythmic wave of contraction ultimately reaching the cervix might be delayed in some subjects, depending on the initial stage of psychological stimulation. Some are easily excited and some rather very slowly, depending on individual character and initial state of the mind. Any disparity between the discharge time on the part of the male and orgasm in the female, makes

the female subject irritable, dissatisfied and hysteric. Many young husbands, high strung and of nervous temperament, seek a remedy from their physicians, for improving their discharge time (retention power) which is too short and for which their family life is rather unhappy. In these cases reciprocal stimulation is an important factor. A case was reported where the discharge time on the part of the husband was more than an hour, before which both of them could not be relaxed. This was rather weary on the part of the husband no doubt, but with another woman the discharge time was perfectly within normal limits.

The above statements will find corroboration in Van de Velde's book, *Ideal Marriage, Its Physiology & Technique* as well as in the writings of Havelock Ellis. It will not be difficult to realize why the orgasm is absent and the zest and pleasure of sexual act is lost even when the ovaries and other secondary sex organs are in tact. When there is a breach in the tubes the rhythmic wave *cannot* find its way to the uterus and the cervix.

The above observations were corroborated by scientifically minded and intelligent patients who got this operation performed and became victims of its consequences. This was also corroborated by another report from a patient of rural type, illiterate and unsophisticated. This patient aged about 26 with three children was bent upon undergoing the ligation operation for economical reasons. The preliminaries for the operation were carried out, but still she thought it wise to consult her elder sister-in-law who had undergone the operation two years ago. To her great surprise, the elder sister tried to dissuade her with the remark that without either knowing the future possibilities nor being told about the future consequences she had submitted only for economic reasons, but she was now repenting. The desire was there, but the pleasure was lost for good and the sexual act was nothing but a mechanical one.

Gynaecologists are concerned with the actual operation which is no doubt performed with the best of skill, but their responsibility ceases and the aftermath has to be borne

by the family physician. In course of their practice they meet with a variety of abnormal behaviour. In some cases, unidentifiable maladies are developed; the commonest being pain in the abdomen, sometimes so acute that the patients cry in agony. The physician finding no abnormality even after proper examination gives an injection of 2 c.c. saline and the patient becomes relieved. Also constant headache, giddiness, of vision and palpitation etc. are common symptoms. In some cases, temperamental changes become so acute that this becomes a source of annoyance to the family. The most amiable, considerate and gentle women become peevish, quarrelsome and offensive, and look to things always from a different and abnormal angle. Not only so, gradually in some cases physical changes are also brought about. Elderly subjects usually become abnormally adipose and younger subjects usually manifest just the opposite change. In some cases, hoarseness of voice has even been observed. This is the picture in short of the consequences of ligation operation which develops in a good percentage of cases, particularly in younger subjects.

It is really consoling news that the Mudaliar Commission, although suggesting these operations for family limitation, have given some considerate opinion about the ill effects of such operations.

(k) Operation for the male : In the case of males, apart from psychological changes, the libido becomes sometimes so much enhanced due to stimulation of the interstitial glands when the seminal epithelium degenerates, that it becomes difficult for the wife to afford satisfaction. The male also finds it difficult to relax completely. In advanced age it is helpful to some extent when libido might improve, as in the case of Stynach's operation. Usually when the seminal epithelium degenerates, there is likelihood of proliferation of the interstitial gland. If this proliferation continues unabated there is every possibility of adenoma developing in the testis and also in the suprarenal gland. In other cases, if no such symptoms develop, there is every possibility of losing the sex drive, where according to the

laws of nature, every stimulation is sure to be followed by subsequent depression.

It is apparent that the attitude developed from mere ignorance ends ultimately in disaster and repentance.

#### REFERENCES

- |                     |      |   |
|---------------------|------|---|
| B'loch, Iwan        | 1937 | <i>The Sexual Life Of Our Time.</i><br>New York, Falstaff Press Inc.                                |
| Ellis, Havelock     | 1936 | <i>Studies On Psychology Of Sex,</i><br>Vol. 1, part ii & Vol. 2, part i<br>New York, Random House. |
| Kish, Heinrich      | ...  | <i>The Sexual Life Of Woman.</i><br>London. William Heinemann.                                      |
| Sanyal, S. N.       | 1956 | in <i>Man In India.</i> vol. 36. no. 4.   |
| Sturgis, F. R.      | 1931 | <i>Sexual Debility In Man.</i><br>Chicago, Logan Brothers.  |
| Van de Velde, Th.H. | 1940 | <i>Ideal Marriage, Its Physiology<br/>and Technique.</i><br>London. William Heinemann.              |

# REPRODUCTIVE LIFE OF SOME MAHARASHTRIAN BRAHMAN WOMEN

SIPRA RAKSHIT

( *Received on 26 March 1962* )

## *Introduction*

**I**N the present study an attempt has been made to collect complete reproductive history of 103 Maharashtrian Brahman women by interviewing each woman at her residence. The birth date of sibs of these women was ascertained through either horoscopes or family records and as such the majority of material is based on exact dates. Other materials based on general statement have also been included in the analysis. The data were collected by the writer mostly through the medium of Hindi. In case of those not knowing Hindi, the help of a family member knowing Marathi and either Hindi or English was taken. The investigation was carried out during the months of June to October, 1959.

All the 103 women were Marathi speaking and residents of Nagpur city at the time of investigation. The sample includes only those women who have either (i) attained menopause, or (ii) are passing through an irregular phase of it at the time of investigation, the latter belonging to the age group above 45. Widows attaining menopause prior to the death of their husband have only been included.

Exact dates regarding menarche and menopause were not available, but were based on the statement of the women concerned. They appeared to be correct up to the year so far as menarche is concerned. They were found to be correct, up to the month in the case of women married (exact date being available) a few months before or after menarche. In

case of menopause, however, the situation was different, since it was quite recent and was remembered. The dates of birth and marriage of the women and the children born to them were mostly correct up to the day.

Subcastes of the married couples are given in Table 1. All of them are endogamous. There is only one case of inter-marriage between Kokonastha (wife) and Desastha (husband). It has been included in the Kokonastha subcaste in Table 1. In Maharashtra, these three subcastes are the most important both numerically and from the point of view of status (Wilson, 1877).

TABLE 1

**Subcaste of Subjects**

Subcaste	No. of couples
Kokonastha	57
Desastha	35
Karade	11
Total	103

The year of marriage has been grouped into 10-year classes as shown in table 2. 51.5% of couples were married between 1921-1930 and 23.3% between 1911-1920. Half of the remaining couples, i.e. 12.6% were married before 1910 and the other half after 1930.

TABLE 2

**Marriage Period**

Marriage period	No. of couples	%
1892—1900	3	2.97
1901—1910	10	9.71
1911—1920	24	23.30
1921—1930	53	51.46
1931—1940	12	11.65
1941—1945	1	0.97
Total	103	100.00

Husbands were born between 1874 and 1912, while wives between 1883 and 1918.



*Reproductive Events*

The average age of wives for the different reproductive events is given in Table 3, which shows statistical constants based on unverified statements. Table 3A, on the other hand, presents statistical constants based on verified statements, i.e. ages correct up to the day.

TABLE 3  
Events of Reproductive Life (Unverified)

Events	Number	Age of wives in years	
		Mean	S. D.
Menarche	103	14.34	1.09
Marriage	103	14.35	3.19
First Birth	83	19.19	4.54
Last Birth	89	33.37	5.65
Menopause	90	45.84	2.79

TABLE 3A

Events	Number	Age of wives in years			
		Mean	S. E.	S. D.	S. E.
Marriage	33	15.83	0.48	2.73	0.34
First Birth	39	19.85	0.87	5.41	0.61
Last Birth	38	32.26	0.81	5.01	0.57

*Menarche*

Age for this event could not be verified. No specific attempt was made to find out the exact date of a biological event which happened some 40 or 50 years ago. However, a few were able to state the interval between marriage and menarche. 41 women were able to state the age at menarche correctly up to the month, while 62 up to the year. The mean and S. D. (table 3) for age at menarche are therefore approximate. The present data are not therefore fully comparable with those of the Bengali (Sen, 1953) and Assamese (Rakshit, 1960) girls.

Banerjee and Mukherjee (1961) have studied a sample of 1047 Hindu Bengali female patients from a private clinic

and obtained a mean menarcheal age of 13.60 years. This mean, according to the above authors, is significantly higher than those obtained by the present writer among Assamese girls (1960) and by Sen (1953) among Bengali girls. It appears to the present writer that the three series are not strictly comparable. It was already shown that the Bengali and the Assamese samples were not significantly different from one another so as far the Brahman and Kayastha castes were concerned (Rakshit, 1960). Banerjee and Mukherjee's sample is probably more heterogeneous in the sense that it includes women from various castes, districts and villages of Bengal, including some from the 'Hilly districts of North Bengal'.

All available data in question are presented in Table 4.

TABLE 4  
Age at Menarche

Region	Community	Number	Age at menarche (in years)	Author
Bengal	Brahman	153	12.80	Sen (1953)
	Vaidya	275	12.70	"
	Kayastha	219	12.87	"
	Pooled	647	12.73	"
	Bagdi	60	13.25	"
	Mixed rural and urban, all castes	1047	13.60	Banerjee & Mukherjee (1961)
Assam	Brahman	60	12.46	Rakshit (1960)
	Kayastha	32	12.45	"
	Kalita	17	12.12	"
	Muslim	29	13.35	"
	Pooled	138	12.39	"
Maharashtra	Brahman	103	14.34	Present study
Kerala	Nayar	74	14.29	Sen (1953)

### *Marriage*

As already pointed out the period of marriage was between 1892 and 1945, the majority of them occurring

between 1911 and 1930. Early marriage being the then practice in India, the mean age at marriage is 14.35 years, a figure almost equal to the average age at menarche. Pre-menarcheal marriages constitute as high as 75.7% in the sample. The mean age at marriage rises to 15.83 years in the case of 33 women whose exact dates of marriage are known. The age at marriage appears to increase with time, as will be evident from the mean values of Table 5. Detailed statistical constants in this regard are given in Table 5A for two periods only.

TABLE 5  
Mean Age at Marriage in Years

Marriage period	No.	Age of husband		No.	Age of wife	
1892—1900	1 } 10	15.00	21.38	3 } 13	9.33	11.05
1901—1910	9 }	22.08		10 }	11.55	
1911—1920	18	22.46	24	13.33		
1921—1930	51	24.46	53	14.51		
1931—1940	12 } 13	27.25	27.92	12 } 13	17.87	18.88
1941—1945	1 }	36.00		1 }	31.00	
All periods	92	24.12	103	14.35		

Curjel (1920) on the basis of 481 women found the average age at marriage to be 13.83 years. National Sample Survey (1956) estimates (1930 and after marriages) wife's age at marriage (Urban India only) to be 15.1 years.

The husband's mean age at marriage, based on 92 cases, was found to be 24.12 years. 38 persons were able to report the exact dates of birth and marriage, which yielded a mean of 24.98 years. NSS (1956) estimates husband's age at marriage (Urban India) to be 22.2 years.

TABLE 5A  
Age at Marriage

Marriage Period	No.	Age of husband			No.	Age of wife		
		Mean	S. E.	S. D.		Mean	S. E.	S. D.
1911—1920	18	22.46	0.648	2.748	24	13.33	0.310	1.519
1921—1930	51	24.29	0.536	3.830	53	14.51	0.315	2.291

*First Birth*

The mean age of the mothers at the birth of the first child was 19.19 years, it being based on 83 cases. Excluding 3 extreme cases the mean age was found to be 18.51 years. But the same based upon exact date of birth of the mother appeared to be slightly, higher, namely 19.85 years (N=39). Excluding 2 extreme cases among the latter group the mean age worked up to 18.76 years. Table 6 shows the frequency data of mother's age at birth of the first child.

TABLE 6

**Mother's age at First Birth**

<b>Mother's age in years</b>	<b>Frequency</b>
12—13	0
14—15	4
16—17	23
18—19	28
20—21	14
22—23	6
24—25	2
26—27	2
28—29	0
30—31	1
32—33	1
34—35	0
36—37	0
38—39	1
40—41	0
42—43	1
Total	83

*Last Birth*

The mean age of mothers at the last birth of the child was 33.37 years, it being based on 89 cases. The same based upon 28 cases of exact date of birth of the mothers worked upto 32.26 years. The corresponding value for the Bengal upper caste group (N=93) is 35.10 years (Sen, 1953). The frequency distribution is shown in Table 7.

TABLE 7  
Mother's Age at Last Birth

Mother's age in years	Maharashtrian Brahman	Upper castes Bengal (Sen, 1953)
15—18	0	1
19—22	4	5
23—26	6	5
27—30	17	7
31—34	17	20
35—38	26	23
39—42	15	23
43—46	4	9
Total	89	93

### *Menopause*

The exact age at menopause is at best an approximation because of its uncertain and prolonged duration. The mean age was found to be 45.84 years ( $N=90$ ). The frequency data is given in table 8. Sen (1953) obtained a mean of 47.50 years for Bengal upper castes.

TABLE 8  
Age at Menopause

Age in years	Maharashtrian Brahman	Bengal upper castes (Sen, 1953)
37—38	0	4
39—40	1	7
41—42	7	5
43—44	22	12
45—46	24	18
47—48	23	20
49—50	9	32
51—52	1	27
53—54	2	5
55—56	1	1
Total	90	131

In order to find out whether the reproductive events are in any way related to the gradual lapse of time, i.e. from 1892 to 1945, as found in the gradual increase of age at marriage in both sexes (Table 5), calculations were made for each decade, the results of which are given in Table 9.

TABLE 9  
Reproductive Events : Mean Age in Years

Marriage period	Menarche		First birth		Last birth		Menopause	
	No.	Mean	No.	Mean	No.	Mean	No.	Mean
1892—1900	3 } 13	13.67 } 13.55 }	1 } 8	17.00 } 17.40 }	3 } 9	40.56 } 38.66 }	3 } 13	46.67 } 46.55 }
1901—1910	10 }	13.52 }	7 }	17.46 }	6 }	37.72 }	10 }	46.70 }
1911—1920	24	14.29	17	18.14	19	33.51	24	46.46
1921—1930	53	14.49	46	19.14	49	32.79	48	45.59
1931—1940	12 } 13	14.55 } 14.58 }	11 } 12	21.29 } 22.18 }	11 } 12	31.40 } 31.78 }	5 } 5	42.98 } 42.98 }
1941—1945	1 }	15.00 }	1 }	32.00 }	1 }	36.00 }	—	—
All periods	103	14.34	83	19.19	89	33.37	90	45.84

Owing to the paucity of data at the earlier (1892-1900 and 1901-1910) and the later (1931-1940 and 1941-1945) periods, these two have been lumped together for the sake of brevity.

Detailed statistical constants are also given for the periods 1911-1920 and 1921-1930 (Table 9A).

TABLE 9A

## Age at Reproductive Events : Statistical constants

Marriage period	Menarche			First birth			Last birth			Menopause		
	No.	Mean	S. E.	S. D.	No.	Mean	S. E.	S. D.	No.	Mean	S. E.	S. D.
1911—1920	24	14.29	0.22	1.07	17	18.14	0.96	3.97	19	33.51	1.23	5.34
1921—1930	53	14.41	0.15	1.09	46	19.14	0.63	4.30	49	32.79	0.83	5.79
										46.46	0.74	3.62
										45.59	0.33	2.26

It would appear from Table 9, that the age at birth of the first child increases slightly through the four decades or so. This is obviously due to the trend of increased age at marriage.

On the other hand, it appears that the age at menarche, at the birth of the last child and at menopause, which are not apparently affected by the age at marriage, show a tendency towards change ; though it should be noted that the age for the above phenomena were not known very accurately.

The age at menarche seems to have increased from 13.55 years to 14.58 years during a period of about fifty years since the last decade of the 19th century. This is contrary to the findings in Europe and America, where the trend of the menarcheal age appears to be going down (Sarkar, 1951 ; Banerjee and Mukherjee, 1961). The age at menopause, however, appears to decrease from 46.55 years to 42.98 years. The most conspicuous change is seen for the age at last birth where the average comes down from 38.66 years to 31.78 years. This is of special importance in view of the comparatively correct estimation of age at last birth compared to the other two events.

### *Menarche-Conception Interval*

For this purpose the data were divided into two sections (i) Group A, those married before menarche, and, (ii) Group B, those married after menarche. For the computation of menarche-conception interval, the date of termination of first pregnancy (either as live birth, still-birth or abortion) was taken into consideration. In case of full-term baby the interval was worked out by subtracting the duration of conception i.e. ten months (Ashley Montagu, 1948). In cases of still-birth and abortion, conception lasted for about 3 months and upwards.

The interval for the two groups is shown in Table 10.

TABLE 10

#### **Menarche—Conception Interval (in years)**

<b>Group</b>	<b>Number</b>	<b>Mean</b>	<b>S. D.</b>
A	79	2.63	2.34
B	24	4.89	3.55



The higher mean for group B is evidently due to the inclusion of women, who were married comparatively late. The mean of 2.63 years for Group A, thus appears to be the approximate sterile period. The adolescent sterility interval for certain Bengali upper castes (Brahman, Vaidya and Kayastha) and the Bagdi have been provided by Sen (1953). These are shown in Table 11.

TABLE 11  
Menarche—Conception Interval  
Group A

Caste & Region	No.	Interval in months	Author
Upper Castes, Bengal	120	29.30	Sen (1953)
Bagdi, Bengal	53	31.21	"
Brahman, Maharastra	79	31.05	Present study

The frequency distribution of menarche-conception interval in months is presented in Table 12.

TABLE 12  
Menarche—Conception Interval

Group A		Group B	
Interval in months	Frequency	Interval in months	Frequency
Below—10	14	Below—20	2
11—20	16	21—40	10
21—30	19	41—60	3
31—40	5	61—80	4
41—50	12	81—100	1
51—60	4	101—120	2
61—70	3	121—140	1
71—80	2	141—160	0
81—90	1	161—180	0
91—100	0	181—200	1
101—above	3		
Total	79	Total	24

### *First Birth-Last Birth Interval*

The interval between the first and the last birth (inclusive of still-borns) for a group of 74 women, the exact dates of which were obtained correct up to the month, is 14.27 years with a S. D. of 6.11 years. It decreases to 13.36 years (S. D. = 6.19 years) in the case of 53 women having dates correct up to the day.

TABLE 13

#### **First Birth—Last Birth Interval (in years)**

Sample	Number	Mean	S. D.
1. Correct up-to-the-day cases	53	13.36	6.19
2. Correct up-to-the-month cases (inclusive of first sample)	74	14.27	6.11

### *Last Birth-Menopause Interval*

This interval was found to be 12.46 years based on 77 cases, while it was 12.66 years in another sample of 71 cases. The former sample included all cases with the date of last birth known correct either up to the month or day, while in the case of the latter the dates were correct up to the day. The inaccurate nature of the date of menopause has already been mentioned. The statistical constants are shown in Table 14.

TABLE 14

#### **Last Birth—Menopause Interval (in years)**

Sample	Number	Mean	S. D.
(i) Correct up-to-the-day cases	71	12.66	5.60
(ii) Correct up-to-the-month cases (inclusive of first sample)	77	12.46	5.76

Compared with the adolescent sterility interval of 2.63 years the sterility at the end of the reproductive life appears to be of far greater duration. The mean for the present series is 12.6 years, while that of Sen's (1953) upper caste

Bengali Hindu sample is 12.41 years. Frequency distribution for the above interval is given in Table 15.

TABLE 15  
Last Birth-Menopause Interval

Interval in years	Frequency
1— 3	3
4— 6	10
7— 9	13
10—12	12
13—15	13
16—18	14
19—21	7
22—24	2
25—27	3
Total	<hr/> 77

### *Birth Interval*

Table 16 shows the interval between two successive births (including still-born). It is based on birth dates correct either up to the day or month.

TABLE 16  
Birth Interval (in years)

	I <sub>1</sub>	I <sub>2</sub>	I <sub>3</sub>	I <sub>4</sub>	I <sub>5</sub>	I <sub>6</sub>	I <sub>7</sub>	I <sub>8</sub>	I <sub>9</sub> and above
Number of Intervals	60	57	50	49	41	30	23	10	9
Mean Interval in years	2.69	3.09	2.81	3.44	3.14	2.75	3.40	2.59	3.34

Pooled Mean=3.01 (N=329)

If all the 329 intervals are considered together ignoring birth order we get a pooled mean interval of 3.01 years.

Some comparative data for birth interval are given in Table 17.

TABLE 17

**Birth Interval**

<b>Group and region</b>	<b>Interval in years</b>	<b>Author</b>
Brahman, Maharashtra	3.01	Present Study
Upper Caste, Bengal	Group A 2.26	Sen (1953)
	Group B 2.60	"
Bagdi, Bengal	2.41	"
Nayar, Kerala	2.73	"

It may be noted that the mean birth interval for city population of India is 38.6 months (3.21 years) according to the National Sample Survey (1956).

Birth intervals do not show any appreciable variation with the lapse of time, as will be evident from Table 18.

TABLE 18

**Birth Interval in Years**

<b>Marriage period</b>	<b>Number</b>	<b>Mean</b>
1892—1900	1 6	2.40 3.19
1901—1910	5	3.35
1911—1920	16	2.96
1921—1930	42	2.97
1931—1940	9 10	3.51 3.36
1941—1945	1	2.00
All periods	74	3.04

***Reproductive Span***

As the exact dates were not available for all the cases the span noted below is only a rough estimate. The mean span has been calculated from the two events menarche (14.34 years, N=103) and menopause (45.84 years, N=90), which comes to 31.50 years approximately. Curjel (1920) has observed a span of 32.14 years based on 74 cases.

### Children Born

The average number of children surviving during the time of investigation was found to be 4.49 per maternity, the mean being based on 103 cases.

The average number of children ever born (including live births and still-births) to these 103 women is 6.06 per maternity. Compared with some of the Bengal castes (Sen, 1953), the fertility of Maharashtrian Brahman women seems to be slightly lower. The comparative figures are given in Table 19.

TABLE 19  
Average Number of Children Ever Born

Group	No. of mothers	Children ever born per maternity	Author
Brahman, Bengal	21	6.71	Sen (1953)
Vaidya, Bengal	58	7.98	"
Kayastha, Bengal	20	8.70	"
Brahman, Maharashtra	103	6.06	Present study.
Muslim Peasant, East Pakistan	78	7.14	Neel (1958)

All the figures for col. 3 (Table 19) have been worked out excluding the sterile cases.

The N. S. S. (Dasgupta *et al.*, 1946 : 281) gives values between 6.1 (for all women aged 42 and above, with a marriage duration of 32 years or more.) to 7.4 (estimation giving allowance to recall, lapse etc.).

The average number of live births, still-births and abortions per maternity appeared to be 5.81, 0.25 and 0.59 respectively. The average number of pregnancies works out to 6.62 per maternity.

The frequency distribution of the 103 mothers according

to the number of surviving sibs is given below (Table 20), while the same showing the number of children ever born is given in Table 21, the mothers having passed the child-bearing age.

TABLE 20  
Surviving Sibs

No. of sibs surviving	No. of mothers N=103
0	2
1	6
2	11
3	16
4	20
5	15
6	14
7	7
8	10
9	2

TABLE 21  
Children ever born

No. of children ever born (including still births but not abortions)	No. of mothers (N=108)
0	8
1	3
2	5
3	12
4	11
5	14
6	15
7	8
8	15
9	11
10	5
11	3
12	0
13	1

Neel (1958) has provided similar figures for a few groups. The present data show the highest frequency of sibships, 5 and 6, while Neel has found the highest frequency at 6 or even at 7. Fifty per cent of the most fertile Maharashtrian mothers gave birth to 71.2% of the children, which fits in very well with figures from East Pakistan (69.0%), Agogo (67.7%), Liberia (78.5%) and New South Wales (76.4%) (Neel, 1958).

Eight Maharashtrian Brahman women are without any children (Table 21) out of a total of 111 women investigated. All of them had crossed the child-bearing age. Sterile marriages thus appear to be 7.2% approximately. The N. S. S. (Rural) found it to be 7 to 8%. The above study estimated it for marriages before 1930 in India to be 7.5%—a figure nearer to South Africa (European), Italy and Norway, but lower than either U. S. A. or Sweden (Das Gupta *et al.* : 280-281).

The number of mothers giving birth to still-born children is shown in Table 22.

TABLE 22  
Number of Still-born

Number of still-born (per maternity)	Frequency of mothers
0	83
1	15
2	4
3	1

Table 23 based on the data of Table 22 shows that the majority of mothers (about 80%) do not give birth to any still-born baby. About 5% of mothers are responsible for a still-birth frequency as high as 42%.

TABLE 23  
Mothers and Still-born in %

% of Mothers (N=103)	% of Still-borns (N=26)
14.6	57.7
3.9	30.8
1.0	11.5
80.6	0.0

The number of abortions per maternity is given in Table 24.

TABLE 24

Number of Abortions : Frequency Data	
Number of abortions per maternity	Frequency of mothers
0	69
1	19
2	9
3	3
4	2
5	0
6	0
7	1

TABLE 25

## Mothers and Abortions in %

% of Mothers (N=103)	% of Abortions (N=61)
18.4	31.1
8.7	29.5
2.9	14.8
1.9	13.1
1.0	11.5
67.0	0.0

It appears from the above tables that abortion is more frequent than still-birth. About 6% of mothers are responsible for 40% of the total abortion cases in the present sample of 103 women.

### *Mortality of the First-born*

The first-born children of 103 mothers have been analyzed with reference to mortality (Tables 26 & 27).

TABLE 26

Mortality of the First-born					
Total No. of 1st pregnancies	Number of abortions	No. of still-borns	Number of deaths within		
			1 Yr.	2 Yrs.	3 Yrs.
103	9	4	11	6	2



TABLE 27

Cumulative Percentage of Mortality				
Still-birth and abortion		Died within		
		1 Yr.	2 Yrs.	3 Yrs.
Number	13	24	30	32
%	12.6	23.3	29.1	31.1

The mortality of the first-born appears to be high (29.1%). Some comparative data from Bengal (Sen, 1953) are given in Table 28.

TABLE 28

## Mortality of the First-born

Group	Total No. of 1st pregnancy	No. died within 2 years of age including abortion and still-born	Percentage
Bengal, Brahman	41	5	12.2
Bengal, Vaidya	131	27	16.0
Bengal, Kayastha	50	18	36.0
Bengal, Bagdi	54	18	33.3
Maharashtra, Brahman	103	30	29.1

Altogether 685 pregnancies (including 3 twins) were reported for 103 mothers of which the number of sibs surviving was 462. 136 sibs born alive were dead. The number of still-borns was reported to be 26, while that of abortion 61.

TABLE 29

## Pregnancy Record : Percentage Frequency

All pregnancies	Sibs surviving	Sibs dead	Still born	Abortion
Number 685	462	136	26	61
% 100	67.4	19.9	3.8	8.9

### *Net Reproductive Index*

The NRI of the Maharashtrian women has been found to be 2.32. It appears to be somewhat lower than those obtained by Sen (1953) among Bengali women.

TABLE 30

Group	Net Reproductive Index		NRI
	Total No. of mothers	Total No. of daughters	
Bengal, Brahman	21	61	2.90
Bengal, Kayastha	20	69	3.48
Bengal, Vaidya	53	183	3.43
Maharashtra, Brahman	103	239	2.32

It should however be noted that the above values are based on completed fertility cases.

### *Sex-ratio*

The three sex-ratios, primary, secondary and tertiary of the children born to the 103 Maharashtrian women are given in Table 32.

TABLE 31

Sex-ratio		
Primary	Secondary	Tertiary
$\begin{array}{cc} \uparrow & \circ \\ \circ & \circ \\ + & \end{array}$	$\begin{array}{cc} \uparrow & \circ \\ \circ & \circ \\ + & \end{array}$	$\begin{array}{cc} \uparrow & \circ \\ \circ & \circ \\ + & \end{array}$
490 : 510	487 : 513	469 : 531

The tertiary sex-ratio of  $469 \frac{\uparrow}{\circ} : 531 \frac{\circ}{+}$ , is in conformity with the general trend of the sex-ratio in South India and contrary to that of North India.

The primary sex-ratio is a very rough estimate. Of the 61 cases of abortions recorded, only 11 could be sexed as 7 males and 4 females for computing the primary sex-ratio. The 50 unidentified abortion cases, if taken into account either as all males or all females, the two extreme values work out to be  $498 \frac{\uparrow}{\circ} : 502 \frac{\circ}{+}$  and  $481 \frac{\uparrow}{\circ} : 519 \frac{\circ}{+}$  respectively.

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#### REFERENCES

1. Ashley Montagu, M. F.      1957 : *The Reproductive Development of the Female*. New York.
2. Banerjee, D. and S. P.      1961 : The Menarche in Bengalee Hindu girls. *J. Ind. Med. Assocn.* 37 : 261-270.
3. Curjel, D. F.                1920 : The Reproductive life of Indian Women. *Ind. J. Med. Res.* vol. 8 : 367.
4. Das Gupta, A.,                1956 : The National Sample Survey : Couple  
R. K. Som, M. Mazumder,  
S. N. Mitra,                      Fertility, *Sankhya* 16 : 230-432.
5. Kuczniski, R. R.              1935 : *The Measurement of Population Growth*  
p. 120, p. 156.
6. Rakshit (Guha), Sipra      1960 : A Short note on the Menarcheal age of.  
Assamese Girls, *Man in India*, 40 : 52-55
7. Sen, Tulika                  1953 : Reproductive life of some Indian  
women, *Man in India*, 33 : 31-54.
8. Sarkar, S. S.                 1951 : The Place of human biology in  
anthropology and its utility in the  
service of the nation. Presidential  
Address, Anthropology Section,  
Indian Science Congress, Bangalore.
9. Wilson, J.                    1877 : *Indian Caste*, vol. 2 : 18-21. Bombay.

## MISCELLANEOUS NOTES

### 1. KOTA KINSHIP TERMS

The Kota are one of the important ethnic groups in the Nilgiri Hills. They live in seven villages, of which six are on the Nilgiri plateau proper and one is at Gudalur at the north-western base of the hills. Their social system is not based on caste. They speak a mixture of Tamil and Canarese. The kinship terms were collected from December 1960 to February 1961 in course of a demographic survey. Their population, as enumerated by the present writer during the above period, was 1,112. It was formed by 581 males and 531 females, giving a sex-ratio of 91.4 female per 100 males.

The kinship terms of the Kota are presented here. The full extensions of the terms were not secured, and there might have also been a few omissions. The analysis is based on genealogical charts collected from various families in the different villages.

TABLE

Sl. No.	Kota terms	Terms of address	Relationship	Speaker	Remarks
1 (i)	Ain	Aya	(i) Father	* M sp & W sp	
(ii)	Val Ain	"	(ii) Step father	"	
2 (i)	Aw	Ava	(i) Mother	"	
(ii)	Val Aw	"	(ii) Step mother	"	
3	Perin	Periya or Periya	Father's father	"	
"	"	"	Mother's father	"	
4	Perow	Peruvo or Peruva	Father's mother	"	
"	"	"	Mother's mother	"	
5 (i)	Thalalin or Dodalain	Aya	(i) Father's elder brother	"	
(ii)	Karalin or Kunalain	"	(ii) Father's younger brother	"	
6 (i)	Aun	Annai	(i) Elder brother	"	If elder to the speaker
(ii)	Thalainnin or Dodalimmin	"	(ii) Father's brother's son	"	"
(iii)	Thalachewmin or Dodachewmin	"	(iii) Mother's sister's son	"	"
(iv)	Jadakan or Antaman	"	(iv) Wife's elder sister's husband	M sp	"
(v)	Ann	"	(v) Husband's elder sister's husband	W sp	"

\* M sp=Man speaking; W sp=Woman speaking

Sl. No.	Kota terms	Terms of address	Relationship	Speaker	Remarks
7	(i) Karal	Karale or by name	(i) Younger brother	M sp & W sp	If younger to the speaker
	(ii) Karalinmin	"	(ii) Father's brother's son	"	"
	(iii) Kadachewmin	"	(iii) Mother's sister's son	"	"
	(iv) Jadakan or Antaman	"	(iv) Wife's younger sister's husband	M sp	"
	(v) Karal	"	(v) Husband's younger sister's husband	W sp	"
8	(i) Dodachow	Ava	(i) Mother's elder sister	M sp & W sp	"
	(ii) Kadachow or Kunachow	"	(ii) Mother's younger sister	"	"
	(i) Akkin	Akkay or Akkoe	(i) Elder sister	"	"
9	"	"	(ii) Husband's elder brother's wife	W sp	"
	"	"	(iii) Father's brother's daughter	M sp & W sp	If elder to the speaker
	Akkin or Thalachewmola or Dodachawmol	"	(iv) Mother's sister's daughter	"	"
	Kadach	Kadachai or by name	(i) Younger sister	"	"
	"	"	(ii) Father's brother's daughter	"	If younger to speaker
	"	"	(iii) Husband's younger brother's wife	W sp	"
	"	"	(iv) Son's wife's mother	M sp & W sp	"
	Kadach or Kadachewmol or Kunachewmol	"	(v) Mother's sister's daughter	"	"
	"	"	"	"	"
	"	"	"	"	"
10	(i) Kadach	Kadachai or by name	(i) Younger sister	"	"
	"	"	(ii) Father's brother's daughter	"	If younger to speaker
	"	"	(iii) Husband's younger brother's wife	W sp	"
	"	"	(iv) Son's wife's mother	M sp & W sp	"
	Kadach or Kadachewmol or Kunachewmol	"	(v) Mother's sister's daughter	"	"

Sl. No.	Kota terms	Terms of address	Relationship	Speaker	Remarks
11	Maman	Mamow	(i) Mother's brother (elder or younger)	M sp & W sp	
	"	"	(ii) Father's sister's husband	"	
	"	"	(iii) Husband's father	W sp	
	"	"	(iv) Wife's father	M sp	
12	Mamadmal	Akkay or Akkoe (if elder to the speaker otherwise by name)	Mother's brother's daughter	M sp & W sp	
13	Maim	Maimai	(i) Father's sister (elder or younger)	"	
	"	"	(ii) Mother's brother's wife	"	
	"	"	(iii) Husband's mother	W sp	
	"	"	(iv) Wife's mother	M sp	
14	Antamich	Antamiche (if younger by name)	Brother's wife	"	If elder to the speaker
15	Nathooiin	Nathoonai	Brother's wife	W sp	
16	Ail	Ailo	(i) Wife's brother	M sp	
	"	"	(ii) Sister's husband	M sp & W sp	
	"	"	(iii) Son's wife's father	"	
	"	"	(iv) Father's sister's son	"	
	"	"	(v) Mother's brother's son	"	
	"	"	(vi) Son's wife's father	"	

Sl. No.	Kota terms	Terms of address	Relationship	Speaker	Remarks
17	Mein	Meine or by name	(i) Son.	M sp & W sp	
	"	"	(ii) Elder brother's son	"	
	"	"	(iii) Wife's sister's son	M sp	
	"	"	(iv) Sister's son	M sp & W sp	
18	Maimmol	Akkay or Akkoe (if elder to the speaker otherwise by name)	Father's sister's daughter	"	
19	Anthamn	Annai (if elder to the speaker otherwise by name)	Husband's brother	M sp	
20	Anthamich	Akkay (if elder to speaker otherwise by name)	Wife's sister	M sp	

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## BOOK REVIEWS

**Peasant Life in India : A Study in Indian Unity and Diversity.**  
*Published by The Anthropological Survey of India, Indian Museum,  
Calcutta 13. Pp. 60, 125 illustrations + 16 maps. Rs. 5.15.*

It is not often that I have to review a book which may be epoch-making. And I regret that it has never before fallen to my lot to review such a book written by Indians. Here at last is one.

The Anthropological Survey of India has just published *Peasant life in India, a study in Indian unity and diversity*. In fact this memoir, though consisting of 104 pages, is entirely concerned with certain items of material culture. The different chapters deal with the forms of villages, the types of cottage, the staple diets, oils and oil presses, ploughs and husking implements, bullock carts, and dress, including shoes. Other items of material culture which will be dealt with in one or more later volumes are agriculture and animal husbandry, pottery, basketware, markets, and occupations. Information is also being collected on religious shrines and festivals, on water supply, hygiene, and many other topics.

The enquiry was initiated by Nirmal Kumar Bose, Director of our Anthropological Survey, and was carried out by eighteen workers under the command of Surajit Chandra Sinha. Each worked in one or more states. For example Jaya Datta Gupta and Santibhusan Nandi visited villages in West Bengal. They then dealt singly or jointly with a special item of culture. Thus Datta Gupta wrote part of the chapter on ploughs and Nandi of that on the layout of villages.

The results are most interesting. As regards every item there are large differences between different parts of India, which are

illustrated by maps. It is at once clear that the cultural differences do not coincide with linguistic or alleged racial divisions. Sometimes they depend on climate in a fairly obvious way. Thus in the largest (though not the most productive) area of India bread made from wheat is the staple diet. This area includes most of northern and western India. This is clearly largely because there is not enough water to grow rice. And some of the exceptions confirm this rule. Thus rice is the staple diet in Jammu and some other mountainous regions, but much of the rice grown there is sent south. The main rice area stretches from Assam to Kanya Kumari, and up the west coast into Gujerat. Between them is a millet area covering some of Orissa and Madhya Pradesh and most of Mysore, but supplementing rice in Madras. This could have been predicted from a rainfall map.

But when we come to village planning, things are quite different. Over about half India villages consist of isolated homesteads, dispersed clusters, or shapeless agglomerates. But there is a large area in which houses are built along a street, or in squares. This area includes the south except Kerala, and most of eastern India, but not West Bengal. It reaches the Himalayas in Bihar and Assam and includes a quite isolated area in Saurashtra. However the design of houses depends mainly on climate, like that of staple crops. Flat roofs are mainly confined to the very dry regions of Kashmir, Punjab and north-western U. P. to Rajasthan and to parts of Mysore and Andhra Pradesh. This is a much smaller and drier region than the rice and millet area.

Oil crops seem to depend much more on tradition than cereal crops. Except for Kerala, where coconut oil predominates, the main oil crop south of the Vindhya, and in Saurashtra, is sesamum. West Bengal, Bihar, and much of Uttar Pradesh, use mustard, and north-western India predominantly ghee. But the distribution of oil presses is quite different. The most important types are rotary presses with and without spouts. The spouted type is found in most of the mustard area, except coastal Orissa, but it is also found in parts of Madhya Pradesh, Mysore, and Kerala. Unfortunately this survey has come a little late. In some districts ground-nuts are grown and the oil extracted by power-driven machines, in others an improved oil-mill called the Wardha Ghani for which

Mahatma Gandhi must take much of the credit, has been introduced. Many tribals employ primitive and inefficient methods, which are described and illustrated, and in parts of Bihar rotary presses are driven by human labour, as the pressing of oil with power provided by cattle or buffalos is the work of a despised caste.

The section on clothes contains little which is unexpected. The pyjama area is curious. Naturally enough they are worn in the Himalaya, but they extend some way into Punjab and U. P. and also in western Gujerat. Most people wear a dhoti, generally with a kachha, that is to say tucked in at the back. But in the south, both Madras and Kerala, and surprisingly in the Punjab and the Mizo Hills, the veshti or lungi style is used. For me this is the most comfortable garment that I have ever worn. But it is not suited for running, or even fast walking, unless one tucks it up.

Over most of India women wear one long piece of unsewn cloth. Only in the north-west, including a good deal of Gujerat, are sewn garments usual. The colour preferences are strange. Thus over most of India red is the preferred colour for brides, but in Mysore widows wear red, so brides must not do so. Wooden sandals are worn in Orissa, Bihar, northern Assam, and parts of West Bengal and Uttar Pradesh, and also in Kerala and part of Kashmir. Outside these areas leather shoes covering the toes are generally worn in northern India, and sandals in the south, with a broad overlap in Madhya Pradesh.

The plough is one of man's most important inventions. Gupta and Saraswati distinguish four types. *C* is the commonest type, used throughout peninsular India, and also in Orissa and Bihar up to the border of Nepal. *D* is used in West Bengal and Assam, *B* in the northwest and parts of Madhya Pradesh and Maharashtra, *A* is a rarity. Over most of India grain is husked with a mortar and pestle, but a husking lever or dhenki is in use in Bihar, Orissa, West Bengal, and most of Assam.

Bullock carts have two types of wheel. A wheel with radial spokes is used in most of India. But in the north, from the Punjab to West Bengal, the spokes are usually arranged in

parallel pairs. Both types are found in West Bengal, and the radial type in Assam. The size of wheels varies greatly from under 3 feet to over 6 feet in diameter. As might be expected, the smallest wheels are found in the dry areas of Rajasthan and Cutch. The biggest of all are found in the Godaveri and Krishna deltas, and in Kerala. They are clearly useful in mud. But why not in the Mahanadi delta ?

Now I want to explain why this is a great book. It is clearly too late to write such a book about Europe or the Americas, and it will soon be too late to do so in China, though if, as Marxists believe, the form of production determines most other human activities, it certainly should be done there, and I hope it has been done. It could be done in some parts of Africa, but not for an area, let alone a population, as large as those of India.

So far anthropologists have tried to classify human groups by skin colour and head shape and by language and religion. Studies have been made on the geographical distribution of particular traits, for example Nirmal Bose has studied that of the swing festival in India. But here we have the beginning of a much more ambitious attempt ; and we see that it is impossible to divide India into 'cultural provinces'.

Let us take Kerala as an example. It agrees with Madras and Mysore in several respects, for example in its ploughs and bullock carts, and with Madras, but also much of the Punjab in the lungi or veshti for men's wear. It agrees with Andhra Pradesh and Gujerat in having the parlour of a house usually between the living room and the courtyard in front of it. The nearest region where one will find similarly isolated homesteads is Malwa. It agrees with eastern India and part of Kashmir in wearing wooden sandals. It is unique in India in two respects. Only the 'higher' caste women wear a kachha, that is to say a cloth tucked between their legs whereas in Madras, Mysore and Andhra Pradesh, only married Brahman women do so, in Maharashtra all women do so, and in part of Madhya Pradesh, only 'low' caste women such as fisherwomen follow this practice. It is also unique in having roofs concave outwards like those of central Sumatra.

It is natural that there are most resemblances to neighbours, and it is possible that Sumatran houses are copied from ancient Indian ones. But what about the wooden sandals? Are we to suppose that they were brought to Kerala from Bihar or from Kashmir? Or did Sankara Acharya introduce them Kashmir from Kerala. We cannot answer such questions, and it is better not to try, provided that we recognize that India has, since the time of Agastya at least, been enough of a cultural unity to make it possible that people in one part of it may have borrowed cultural traits from any other part.

So far comparative technology has been one of the most neglected branches of anthropology. Pitt-Rivers made a brave attempt to start it, but he was largely concerned with savage or at best barbarian cultures. And as he collected human artifacts all over the world, he could not study it intensively. With Nirmal Bose and his colleagues comparative technology comes to something near maturity, even though many topics are not treated in this book. There is still a vast deal to be done, but every Indian who takes India as a unity in diversity seriously should read this memoir. If so another edition will soon be needed.

It would be considerably improved by the emendation of the rather numerous misprints, and some awkward phrases such as 'These.....are recorded here merely for purposes of record' (p. 21. Why else is anything recorded?). Misprints, often with serious consequences, will continue to appear in Indian Government publications so long as proof-readers, who are highly skilled men and women, are paid no more than receptionists. Another improvement would be a map of state boundaries, and one of rainfall contours, or 'isopleths' as they are now called. The latter would help readers to understand the distributions of crop plants and house types.

When all such criticisms have been made, I can only repeat my opinion that this memoir is a contribution of the first magnitude to science.

J. B. S. Haldane

**Homage to Rabindranath Tagore.** Edited by B. M. Chaudhuri. 1961. Pp. viii and 156. Kharagpur: Tagore Centenary Celebrations Committee, Indian Institute of Technology. Rs. 3.50.

The book under review is more than a string of homages paid to the Poet and his memory. Fifteen writers of distinction have presented various aspects of the Poet's life; and the topics cover Tagore's poetry and plays, novels and short stories, music and painting. There is moreover an account of his social philosophy, his attitude towards science and national reconstruction as well as an analysis of the different components of his religious life. The editor, besides contributing the last article, furnishes in the introduction a brief biography which is ably executed.

As some of the authors rank among India's most notable thinkers, and as everyone has tried to give of his best, the production has been of a particularly high quality. Essays like the one on music by Soumyendranath Tagore will be appreciated for its depth of analysis as well as for the introduction which it offers to contemporary classical Indian music. In a number of other essays, contributors have similarly analyzed how Tagore stood in relation to ancient and contemporary movements in thought and literary expression and where also his originality lay. There is an agreement in general; but each author has succeeded in presenting his case from a distinctive point of view.

The Institute of Technology of Kharagpur deserves congratulation and thanks for having made available such a rich fare at a remarkably popular price.

N. K. Bose

**The Idu Mishmis.** By Tapan Kumar M. Baruah. 1960. Available at the Office of the Cultural Research Officer, N.E.F.A. Secretariat, Shillong. 1960. Pp. 110 + 8 plates + 19 drawings.

The present book on the Idu Mishmis, who were formerly known as the Midu or Chulikata, is a popular account of their life and culture. It covers details of daily life, methods of administering justice, religious beliefs and practices, etc.

Mr. Baruah has been in contact with the tribe since 1952 and more particularly since 1957. It appears that his main dependence

has been on interviews ; in which he was partly handicapped by the lack of knowledge of their language. This is evident from some remarks on pages 39 and 40.

There are some observations on the fact that the villages are no longer single-clan villages. The author rather loosely attributes this to the 'migratory habits' of the people, or to the shortage of land, or to the 'exogamous nature of the clans'. The statements on shifting cultivation are, likewise, rather loosely worded (pp. 34 & 35). One naturally expects more accurate statements from a professional anthropologist.

The printing and general get-up of the book are good.

Nirmal Kumar Bose

**Les Religions Brahmaniques Dans L'ancien Cambodge, d'après l'épigraphie et l'iconographie par Kamaleswar Bhattacharya. Paris 1961. Ecole Française d'Extrême-Orient. Pp. 200 and 32 pp. of illustrations.**

This is a study of Brahmanic religions that dominated the Indo-Khmer civilization for many centuries. The author takes the period that extends from the 1st to the 14th cent. A.D. What he calls Ancient Cambodia corresponds to our modern Cambodia, Cochin-China, East Siam and Southern Laos, a region that formed in ancient times a political and cultural unit. The study is based principally on the epigraphy and iconography of the country ; though supplementary information from external sources is not ignored.

This volume of Kamaleswar Bhattacharya is of particular interest to Indian readers as it throws light on the expansive force of Hinduism with its liṅga, dancing Śiva, Gaṇeśa.....etc. The evolution of ancient Brahmanism-Hinduism in India is largely paralleled in ancient Cambodia, where however it grows into an original form. For, of course, there flourished other religions, in particular the old local aboriginal cult. So that the final result is a synthesis of them all.

In ancient Cambodia, therefore, the well-known power of assimilation of Hinduism was at work ; and the Indian culture and Hindu religions that flourished on that continent were a syncretism of Sivaism and Vishnuism in the first place. The author proposes to study the influence of Buddhism in a subsequent volume.

In the Appendix, we find 32 plates of Hindu sculptures, illustrative of the vitality of Hinduism in Ancient Cambodia.

F. E.

**Cultural Anthropology.** By *Nirmal Kumar Bose*. *Asia Publishing House, Bombay*. 1961. Rs. 6.50.

This is a revised edition of a book published in 1929 under the same name. It is a collection of essays on various aspects of culture. The author is a scientist and humanist rolled into one.

The theoretical position which the author takes is essentially valid. In the evolution of human culture, there is no place for predetermination. The course of history has been changed many a time by accidents, contingent and unforeseen. No one factor can be held responsible for determining change. Change has almost always a multi-dimensional explanation. The mechanism of social action and social change is studied by the anthropologist. He can arrive at certain broad generalizations which may be useful in the context of planned change.

In course of different essays the author gives an interpretation of several important concepts like culture trait, culture contact, cultural evolution, etc. against the canvas of Indian society. He has not only used ethnographic material but also drawn in the discussion the Hindu social system and its reactions to western contact.

The language and style are simple and remarkably free from anthropological clichés. Lay readers might find it as useful and interesting as students of anthropology. The shorter essays given in the appendix offer some practical tips to new field workers in anthropology.

Sachchidananda

**Society Today and Tomorrow : Readings in Social Science.** By *Elgin F. Hunt & Jules Karlin*. *The Macmillan Company, New York*. 1961. Pp. 508. 3.95 dollars.

*Society today and tomorrow* is a paperback. Paperbacks are becoming the fashion and flooding the bookshops to such an extent that one might be inclined to characterize today's society as paperback. That would be unjust. Certainly many of these books are cheap in every sense of the word ; on the other hand, these low-



priced editions of the classics and other valuable works are a boon to poorer students.

*Society today and tomorrow* is an interesting volume of 'readings for the introductory college course in Social Science'. It presents a great variety of selections, necessarily uneven in length and value, culled from the works of some fifty odd modern authors, covering much ground, in fact, all 'the main areas of social life'. The book is mainly about and for American society. In a selection like this, it is to be expected that one will disagree with one author, only to find oneself a few pages further in full agreement with another. True enough, as the Editors remark, 'man's social life is a unity, but it is a very complex unity'.

Part I: 'Basic Factors in Social Life' gives us readings on man, society, culture, social change, population. Part II deals with social problems and social adjustment; whilst Part III considers the economic problems of social life. The next two parts give us views on political problems arising from social life and international relations as they affect human society. The volume concludes with a few selections that purport to give us a glimpse of the emerging 'shape of the future'.

This type of book may be interesting, instructive and stimulating; its drawback is its lack of unity and coherence and absence of a basic philosophy of human society. But even so, these readings should prove useful to students of Social Science.

F. E.

**The Indus Civilization, Cambridge History of India, a Supplementary Volume. Second Edition, By Sir Mortimer Wheeler, C. I. E., sometime Director-General of Archaeology in India. 1960. Pp. 106 & xxvi. Cambridge University Press, Great Britain. 22 sh. 6d.**

The author of this book, Sir Mortimer Wheeler, who worked in the capacity of Director-General of Archaeology in India, has given a clear picture of Harappa and Mohenjodaro civilization as it existed in India between about 2500 to 1500 B. C. In twenty-two different chapters, namely, Terminology, Distribution, Climate, Layout, Burial and Skeletal Types, Military Aspect, Commerce and Transport, Farming and Fauna, Arts and Crafts, Scripts, Religion, Dating, etc., he has ably presented the facts about the Indus Valley civilization.

B. N. Sahay

**Khami Ruins : A Report on Excavations in Southern Rhodesia.** By *K. R. Robinson with Reports by G. Bond & E. Voce.* 1959. Cambridge University Press. Pp. 179. 40s. net.

*Khami Ruins* is an archaeological report on the culture which flourished not more than three hundred years ago around the bank of the Khami River in Southern Rhodesia. The report is systematic and presents us with a co-ordinated picture.

K. Kerketta

**Race Relation and Mental Health.** By *Marie Jahoda, U N E S C O Publication Series.* \$0.50.

The booklet is one of a series of publications by the UNESCO to combat the sinister problem of race prejudice. Race hatred and race conflict are based on scientifically false ideas and are encouraged by ignorance. No nation and no country is free from this evil in one shape or another. The present publication will help in the dissemination of correct information on the subject.

J. V. Francis

**Prehistory and Protohistory of Eastern India.** By *A. H. Dani.* Published by *Firma K. L. Mukhopadhyaya, Calcutta.* 1960 Rs. 25.

The book presents the palaeolithic culture to neolithic culture of India with a critical analysis of the findings. A comparison has been made with the neolithic cultures of Indo-China, Siam, Malaya and Burma. It will serve as a useful text-book for students of prehistory in India.

K. Kerketta

**Social Status and Power in Java.** By *L. H. Palmier, London School of Economics Monographs on Social Anthropology, No. 20.* 1960. 30 shillings.

In this monograph the author has dealt with the status and power structure of Javanese villages in a very interesting way. It throws new light on Indonesian society. Anthropological interpretation has been enriched by historical evidence.

K. Kerketta